Indicators of Success: A Framework for Reporting on the State of the Alberta Capital Region

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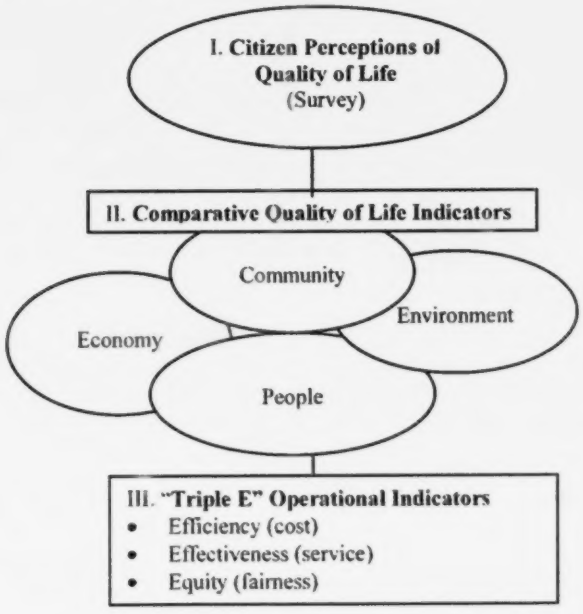
Executive Summary

This report, prepared by the Centre for Performance Measurement and Management (University of Alberta), presents a recommended framework for measuring and reporting on the state of quality of life and economic progress of the Alberta Capital Region. These "*Indicators of Success*" will provide decision makers and citizens of the Capital Region with an account of the state or condition (quality of life) and comparative advantage (vis-à-vis other Canadian municipalities) of the people, communities, economy and environment of the Capital Region. The report contains a baseline (1999) assessment of the Capital Region's current quality of life compared to other Canadian municipalities using the proposed indicators framework and historical national and local indicator data.

The report also contains an assessment of performance indicators and quality of life measurement frameworks used by other Canadian and U.S. communities (see Appendix 1 and 2). Workshops were held in July with expert stakeholders from across the Region to discuss an appropriate suite of indicators to measure the health or state of the Region's human, social (community), environmental and economic resources (see Appendix 4). Each municipality in the Region provided a list of current performance indicators used to monitor municipal performance (see Appendix 3). Finally, a citizen forum of residents from across the Region was held to solicit guidance and opinions on the best approach to soliciting citizen input on quality of life, their perceptions of what contributes and detracts from their quality of life, and areas they feel need improvement. Their input provided directions for future citizen quality of life satisfaction surveys.

Indicators of Success State of the Region Reporting

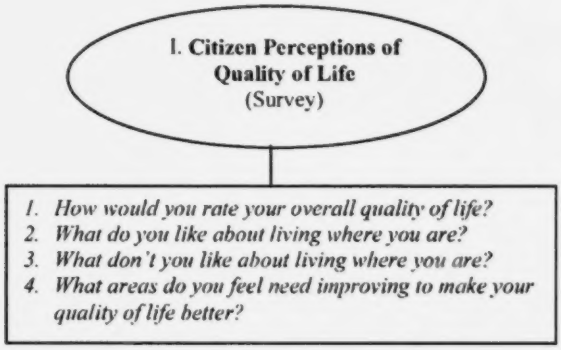
We recommend that an *Indicators of Success* framework be adopted for the Alberta Capital Region to facilitate reporting on the state (quality of life) of the Region. The framework would consist of three tiers of indicators as follows:



The three tiers of indicators make up an integrated measurement framework for assessing citizen perceptions of quality of life, comparing quality of life indicators (economic, social, environmental) with other Canadian municipalities, tracking the trends in the condition of quality of life, and assessing operational service costs and effectiveness. This holistic approach to measurement will provide decision makers will a robust guidance system for managing for the well-being and economic success of the Region. The indicators will provide a means of tracking progress towards the vision and goals set for the Capital Region.

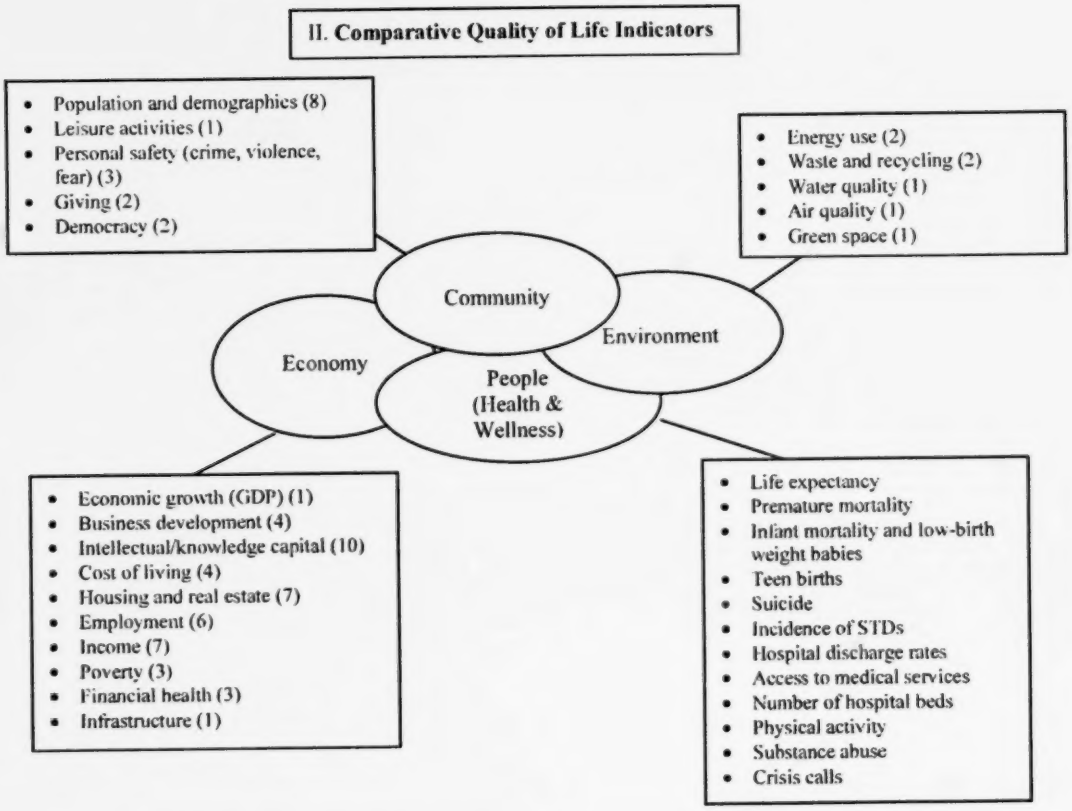
The three tiers of indicators will serve the following purposes:

A. **Citizen Quality of Life Satisfaction Survey** will provide a means of citizen input and engagement by allowing citizens of the Region to rate their quality of life, identify issues that both contribute and detract from their quality of life, and to identify areas needing improvement. Four questions to solicit citizen input are suggested, as per the diagram. The perceptions of citizens regarding quality of life issues can then be compared with the second tier of comparative quality of life indicators to assess gaps between perceptions and reality. New issues may arise from citizen consultation that will suggest new or revised comparative (quantitative) quality of life indicators. The citizen quality of life satisfaction survey would be conducted on an annual basis for the Region from a statistically valid sample of citizens from each of municipalities in the Region.


I. Citizen Perceptions of Quality of Life
(Survey)
1. How would you rate your overall quality of life?
2. What do you like about living where you are?
3. What don't you like about living where you are?
4. What areas do you feel need improving to make your quality of life better?

B. **Comparative Quality of Life Indicators** will provide citizens and decision makers with a kind of "balance sheet" of economic, social, environmental and people (health and wellness) indicators of the current condition and historical trends in the "Quality of Life of the Region" compared to other Canadian municipal regions (see diagram below). The diagram shows four indicator themes (economy, community, people, and environment), each containing a subset of indicators (bracketed figures denote the number of sub-indicators according to a theme). These indicators will be critical to understanding the Region's comparative advantage (or disadvantage) in terms of quality of life vis-à-vis other Canadian communities.

The Comparative Quality of Life indicators framework can be constructed using existing data sources. These include a) the Federation of Canadian Municipalities' (FCM) *Quality of Life in Canadian Communities* - a Quality of Life Reporting System; b) the Edmonton LIFE (Local Indicators for Excellence), and; c) the Edmonton Social Health Index, developed by the Edmonton Social Planning Council. This report contains a baseline data set drawn from the three existing indicator sets, which can be updated, on an annual basis for future reporting. This report should be viewed as a starting point in an evolving process of continued refinement of the indicators framework.



We recommend a process for updating and reporting on the proposed *Indicators of Success* framework to citizens of the Region on an annual basis. While we cannot provide guidance on governance and reporting of the indicators framework, we do offer some suggestions for a potential process. Jacksonville, Florida and the Buffalo-Niagara Region in the U.S. provide examples of communities that have successfully engaged citizens, political leaders, academics and other organizations in an evolving process of dialogue where indicators serve as a basis for identifying priorities for the Region and for improving or sustaining quality of life. The comparative quality of life indicators developed for the Capital Region should serve as a basis of informed, citizen-engaged decision making. One option to be consider may be the establishment of a third-party "Institute", similar to what the Buffalo-Niagara region established, to facilitate, support, and complete annual *Indicators of Success* reports that are made available to all citizens of the Region. An annual public "town hall meeting" might also be considered as part of a process for reporting to citizens and engaging them in a dialogue about the state of the Region and trends in quality of life.

We recommend that a working relationship be developed with the Federation of Canadian Municipalities (FCM) in support of their quality of life indicator reporting

initiative. We recommend that FCM be approached to consider modifying their quality of life reporting system accounting stance to either encompass all municipalities in the Capital Region or the Edmonton CMA as the regional boundary. However, developing a regional accounting stance may prove too costly and statistically challenging, relative to simpler alternatives using the Edmonton CMA as the indicators scale.

We also recommend a working relationship and support of the existing Edmonton LIFE (local indicators for excellence) quality of life indicators initiative and the Edmonton Social Health Index (developed by the Edmonton Social Planning Council). These initiatives, while focused primarily on the City of Edmonton, provide important social, environmental, human health and economic indicators that relevant to quality of life metrics and are not otherwise covered by the FCM indicators. We would encourage working with the parties responsible for Edmonton LIFE and the ESHI to consider a broader regional (possibly Edmonton CMA) accounting stance.

The key advantage of using all three existing indicator initiatives is that a data collection process already exists using traditional statistical data sources such as Statistics Canada, the Alberta Government, the Capital Health Authority, and the Conference Board of Canada.

We also recommend that the *Indicators of Success* framework indicators incorporate indicators of the eight economic clusters for Greater Edmonton recently identified by the ICF Economic Consulting Group (San Francisco) as part of the Greater Edmonton Competitiveness Strategy. The ICF Group noted that the Greater Edmonton Region is one of the most economically diverse and resilient communities in North America. Tracking the condition (health) and trends in these eight economic sectors will be important for ensuring the prosperity, diversity and sustainability of the Region is maintained.

This report also contains a baseline indicators data set for 1999 using the above indicators that show the current quality of life state of the Region (primarily Edmonton CMA or Edmonton City) compared with other Canadian municipal benchmarks: Calgary, Ottawa-Carleton, Toronto, Winnipeg, Regina, Vancouver and the Canadian average. The data is based on the FCM quality of life indicators database, the Edmonton LIFE (local indicators for excellence) indicators and the Edmonton Social Health Index (15 indicators of social, human, and economic well-being). So long as these indicator initiatives are supported and funded in future an available data would exist for updating these comparative quality of life indicators for the Region.

While we recommend a regional accounting stance, individual municipalities within the Capital Region may wish to adopt a similar or modified set of indicators that are meaningful to their communities. However, in our estimation, collection and analysis of data required at the sub-regional level are likely to be both costly and potentially unavailable from data sources such as Statistics Canada.

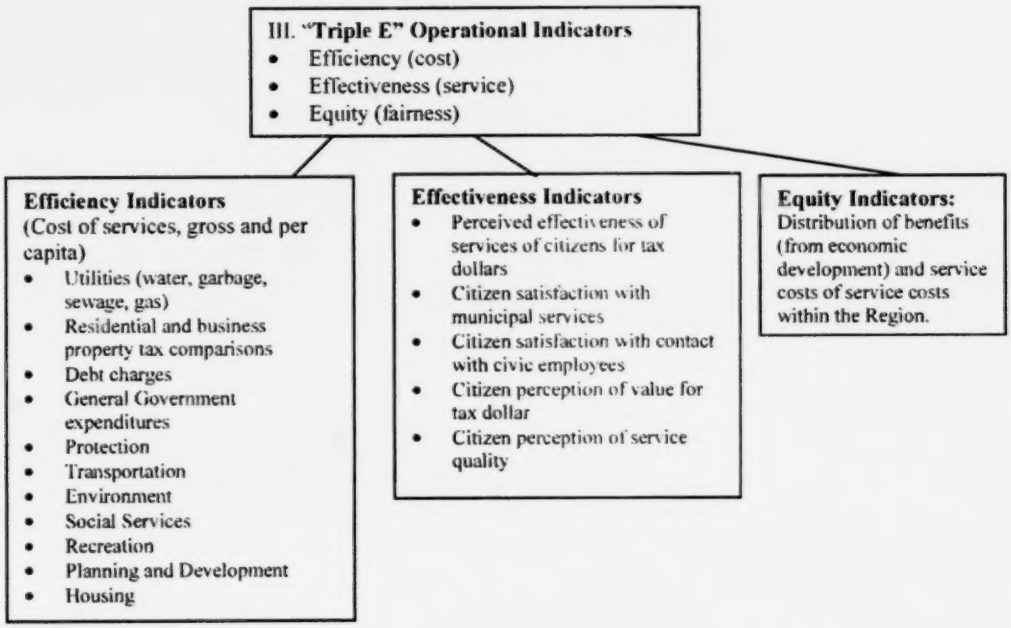
The proposed framework should be considered as an open architecture allowing for additions or deletions from the indicator set as quality of life issues and priorities change. The report recognizes some indicators, identified during the expert working group meetings, which may be considered as future additions to the proposed comparative quality of life indicators framework.

C. **Triple E (Efficiency, Effectiveness and Equity) indicators** are recommended for measuring the comparative advantage of the Capital Region with respect to the operational dimensions (costs, effectiveness of services, and equity) including:

a. The **full costs of program and service delivery** in terms of trends and the comparative position of the Region vis-à-vis other Canadian municipalities;

b. The **effectiveness of services** from the perspective of citizens and other indicators of service effectiveness outcomes, and;

c. The **equitable distribution of both costs and benefits** of Regional programs and services within the Region.


III. "Triple E" Operational Indicators
• Efficiency (cost)
• Effectiveness (service)
• Equity (fairness)
Efficiency Indicators
(Cost of services, gross and per capita)
• Utilities (water, garbage, sewage, gas)
• Residential and business property tax comparisons
• Debt charges
• General Government expenditures
• Protection
• Transportation
• Environment
• Social Services
• Recreation
• Planning and Development
• Housing
Effectiveness Indicators
• Perceived effectiveness of services of citizens for tax dollars
• Citizen satisfaction with municipal services
• Citizen satisfaction with contact with civic employees
• Citizen perception of value for tax dollar
• Citizen perception of service quality
Equity Indicators:
Distribution of benefits (from economic development) and service costs of service costs within the Region.

The Triple E operational indicators framework will provide decision makers with evidence to compare the Capital Region's operational performance with other Canadian benchmarks as a basis of improving the management of resources of the Region. Ideally a full cost-benefit accounting approach should be considered when examining the operations of the Region and in relation to the quality of life outcomes achieved.

Unfortunately, the Federal of Canadian Municipalities quality of life indicators framework does not contain comparative operational costs and service effectiveness data for Canada. We would encourage the Region to work with the FCM to develop such an indicator set in future at a national level.

Individual municipal governments within the Region may wish to adopt the same set of Triple E operational measurement indicators. The City of Edmonton and Strathcona County, for example, currently use indicators to gauge cost efficiency and citizen perceptions of service effectiveness. Citizen satisfaction surveys of perceived quality and value of services for tax dollars are valuable

forms of feedback to municipal managers and elected officials. The survey currently used by the City of Edmonton could be used as a guide for Regional measurement.

We recommend a working group of municipal program and service managers be struck to develop a meaningful Triple-E indicators framework for assessing Regional cost efficiencies and service effectiveness of programs and services. The aforementioned proposed Institute to guide comparative quality of life indicators could also facilitate the development and reporting of these Triple E indicators. Individual municipalities may wish to develop a parallel set of indicators to report to their own constituents.

An Integrated Systems Approach to Measurement

We recommend that all three tiers of indicators be viewed as an integrated system of indicators that combines the strength of citizen perceptions, comparative quality of life indicators and operational efficiency and effectiveness measures of performance. This would make for one of most advanced and unique performance measurement systems in Canada. Given that quality of life is a complex issue, a systems or holistic accounting approach is required that can examine and understand the interrelationships between various indicators constitutes quality of life. Spatial analysis tools such as GIS (geographic information systems) and other analytical tools should be examined in terms of their capacity to assist decision makers to ask "what if" questions of future possible outcomes based on trend data in the indicator account. These tools would assist decision makers and planners to make more informed decisions that lead to the desired outcome of improved quality of life, effective growth management, and strengthening the diversity and sustainability of the Capital Region.

1.0 Objectives of the "Indicators of Success" Initiative

The objective of this report was to fulfill the needs of the Capital Region Governance Review initiative to assist in the development of a framework of indicators for measuring the success and quality of life of the Capital Region. The Centre for Performance Measurement and Management (CPMM), at the University of Alberta, Faculty of Business, was commissioned with the work. Mr. Mark Anielski, with extensive background in the development of government performance measures and business planning with Alberta Treasury and Alberta Environmental Protection, was the principle author of this report.

The CPMM was asked to complete the following objectives:

To develop a framework of performance measures or indicators of success (i.e. a "report card") and a process for public reporting about regional achievements towards the vision, objectives and frameworks of the Alberta Capital Region. Indicators will be developed for each of the four regional frameworks:

- Economic development
- Social Responsibility
- Environmental Management
- Growth Management

These indicators will be aligned with the elements of the shared vision of coordination and partnership for the Region which include:

- A high quality of life for citizens;
- A community of communities where the local needs, expectations and lifestyles of each community are respected;
- A diverse, self-reliant region;
- Coordination of decisions and services within the region;
- Excellent services to citizens, and;
- Satisfaction with decisions about the region, as expressed by citizens and elected councils.

In order to fulfill these objectives the CPMM took on the following tasks:

1. **Conduct a review and assessment** of existing regional indicators, assess opinions of stakeholders as to relevant indicators of performance, and assess other North American jurisdictional examples relevant to the Capital Region.

2. **Review and assess options for relevant measurement frameworks**, including assessment of models/benchmarks for community indicators (quality of life, economic indicators, environmental, social, and other indicators) relevant to the Capital Region initiative, including identifying potential indicators and accounting-monitoring-reporting systems for measuring quality of life and economic health at a regional and individual community level.

3. **Assess the relevance of indicators to community objectives**, including recommending a relevant set of key progress indicators that would provide citizens of the region and individual communities with information and greater knowledge to assess:
    a. the state (capacity) of quality of life and economic health (productivity) attributes of the Region;
    b. progress towards (trends and directionality) the desired ideal state or goals of the Capital Region;

c. the ideal characteristics for success (quality of life and economic health), and;
d. the long term capacity building needs for the future.

4. **In consultation with the stakeholder groups, develop an "indicators of success" framework for the Capital Region and recommend a process** for assessing trends in the regional-community quality of life/economic health. The framework would include region-community progress indicators for monitoring and evaluating performance and a process of reporting and citizen engagement that facilitates capacity building, productivity improvement, increased quality of life and leads to a greater understanding of the attributes (and trends) of sustainable, healthy and resilient communities in the Region. A process for the review and communication of annual progress will be considered. Also, a process for engaging citizens to solicit their input on issues of quality of life and economic health of the Region will be considered. Such a framework must be robust enough to understand the attributes of strength that comes from the collection of diverse communities in the "mosaic" of the Region while understanding and celebrating the unique strengths of individual communities.

5. **Develop and recommend a decision-making, performance monitoring, and reporting process** using the indicators framework. This may include assessing the opportunity and benefit of an annual process for engaging citizens with ongoing indicator updates, monitoring and reporting for empowering governance and communities.

6. **Solicit feedback from the stakeholder groups** about the proposed indicators framework.

7. **Complete and deliver a final report and recommendations to Alberta Capital Region,** combining the above elements, including revisions due to stakeholder feedback, comments on previous drafts. The result will be a report that includes the framework, indicator sets, evaluation methodology, monitoring system, and reporting process and other recommendations.

2.0 Vision and Goals for the Capital Region

The results of the Alberta Capital Region Review Process established the following vision and associated goals for the Region. The task of this particular project was to identify indicators or measures of success that could align with the vision and goals as established:

Vision	Goals	Indicators
Rooted in strong communication that gives voice to all concerns, the vision of the future is one of coordination and partnership that achieves the following goals:	1. A high quality of life for citizens	
	2. A community of communities where the local needs, expectations and lifestyles of each community are respected	
	3. A diverse, self-reliant region	
	4. Coordination of decisions and services within the region	
	5. Excellent services to citizens	

	6. Satisfaction with decisions about the region, as expressed by citizens and elected councils	

In addition to a vision and goals, the Governance Review process established the following guidelines for principles and leadership:

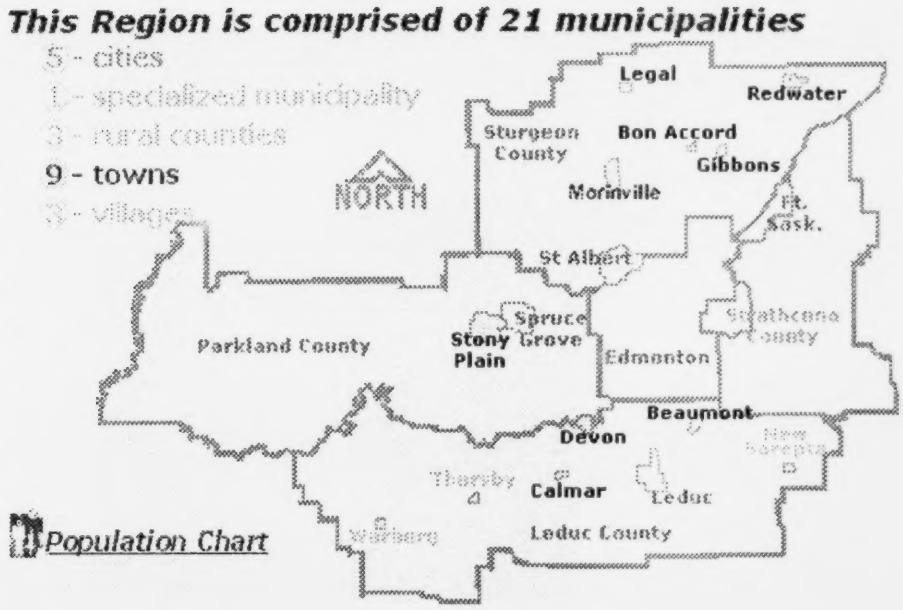
Principles

- **Respect Local Needs**: seek to recognize and understand each other's perspectives.
- **Trust and Mutual Respect**: transparency of information and equal opportunity to contribute to solutions.
- **Clear Goals**: desirable outcomes are defined for each issue.
- **Leadership**: elected officials in municipalities in the region focus on common issues.
- **Interdependency**: work together for mutual success.
- **Cooperation:** focus on cooperation and mutual benefit
- **Grass roots Involvement**: Any changes that affect municipalities are based upon consultation with those who are affected by the decisions.

Leadership

- **Appropriate Community Input**: identify community expectations and ensure convenient and effective opportunities for input on regional issues.
- **Consistency**: develop a process to ensure that regional matters are handled in a way that is known and understood.
- **Dispute Resolution**: develop a process to resolve disputes that is known and understood.
- **Communication and Sharing**: ease of discussion and exchange among municipalities at the political, administrative and community levels.

The Capital Region is composed of 21 municipalities and a population of 861,765 as per the following map:



The following population chart shows that the majority of the Region's population (89.7%) are located in major urban areas including the City of Edmonton (71.5%) followed by Strathcona County (that includes Sherwood Park, a specialized municipality) (7.6%),the City of St. Alberta (5.7%), the City of Leduc (1.7%), the City of Spruce Grove, and the City of Fort Saskatchewan (1.5%). The remaining 10.3% of the Region's population are in towns and rural communities.

Edmonton's official Census Metropolitan Area (CMA) encompasses 19 municipalities, including five cities (Edmonton, St. Albert, Leduc, Spruce Grove and Fort Saskatchewan). Sherwood Park, a suburban municipality adjacent to Edmonton, is now the third-largest urban centre in Alberta. The Edmonton CMA has a land area of 9,537 square kilometers and is one of the largest cities, by area, in North America - larger in area than Chicago, Philadelphia and Detroit.[1]

[1] Source: http://www.semiconductorsite.com/edmonton.html

Alberta Capital Region *Population Chart*		
	Population	Percentage of the Region
Edmonton, City of	616,306	71.5%
Strathcona County	65,340	7.6%
St. Albert, City of	49,243	5.7%
Parkland County	24,769	2.9%
Sturgeon County	15,945	1.9%
Leduc, City of	14,305	1.7%
Spruce Grove, City of	14,271	1.7%
Fort Saskatchewan, City of	13,109	1.5%
Leduc County	12,361	1.4%
Stony Plain, Town of	8,274	1.0%
Beaumont, Town of	6,295	0.7%
Morinville, Town of	6,226	0.7%
Devon, Town of	4,496	0.5%
Gibbons, Town of	2,748	0.3%
Redwater, Town of	2,053	0.2%
Calmar, Town of	1,797	0.2%
Bon Accord, Town of	1,493	0.2%
Legal, Town of	1,095	0.1%
Thorsby, Village of	725	0.1%
Warburg, Village of	549	0.1%
New Sarepta, Village of	359	0.0%
Total Population	861,759	100.0%
Source: Alberta Municipal Affairs, 1998		

Note that the population of the Edmonton CMA (Census Metropolitan Area), whose geographic areas differs somewhat (includes Wetaskiwin) , from the Alberta Capital Region boundary had a population of 862,597 in 1996 (Statistics Canada, *A National Overview: Population and Dwelling Counts*, catalogue #93-357XPB, 1997). Some of the indicators used by the Federal of Canadian Municipalities uses the Edmonton CMA geographic scope.

3.0 Review of Canadian and U.S. Indicator Frameworks

A number of quality of life and community indicator frameworks were reviewed as potential frameworks for the Capital Region (see Appendix 1 and 2). There are in excess of 200 community indicator initiatives in North America, according to the San Francisco based economic policy think-tank Redefining Progress (www.rprogress.org). Nine indicator frameworks were examined (see Appendix I and II) as potential benchmarks for the Capital Region. These included:

- The **Federation of Canadian Municipalities (FCM) "Quality of Life in Canadian Communities"** a quality of life indicators reporting system for 16 Canadian municipalities, including the Edmonton region;

- **the Edmonton LIFE (Local Indicators for Excellence)** quality of life indicators, a collaborative ongoing project that has established a shared definition of quality of life along with roughly 37 indicators to track the trends in quality of life in the Edmonton region (some indicators are at the CMA (census municipal area). Edmonton LIFE is

supported by many community partners and is produced by the Edmonton Social Planning Council;

- **the Edmonton Social Health Index (ESHI)** a series of 15 indicators of human, social and economic health, which are then indexed into a composite index for the Edmonton region. The Edmonton Social Planning Council developed the ESHI.

- **Sustainable Calgary: State of Our City Report 1998** developed by a not-for-profit organization "Sustainable Calgary" that tracks trends in key indicators related to quality of life and sustainable development.

- **State of the Region: Performance Indicators for the Buffalo-Niagara Region in the 21st Century** developed by the Institute for Local Governance and Regional Growth. (http://regional-institute.buffalo.edu) in 1999 to measure, monitor, and propose goals and action steps for performance in the binational Buffalo-Niagara Region. The project focuses not on how the region stands in relation to other metropolitan areas, but rather on how well the region is doing by its *own* account relative to its regional goals, needs, and priorities.

- **Pierce County, Quality of Life Benchmarks – Annual Report**. Pierce Count, Department of Community Services. Pierce County, Washington. February 1998. http://www.co.pierce.wa.us/

- **Quality of Life in Jacksonville: Indicators for Progress** (www.jcci.org/qol/qol.htm) one of the longest-standing quality of life indicators initiatives in North America begun in 1976 tracks 72 indicators of quality of life and engages citizens directly in the process of tracking and reporting results.

- **Compass Index of Sustainability 1999** developed for Orlando and Orange County, Florida in March 2000 that provides a framework for aggregating and displaying an array of sustainability indicators. It uses the indicators developed by a community, company, state, nation or other entity and clusters them to take as their metaphor the points of the compass: N or Nature, E for Economy, S for Society and W for Well-Being. These are the clustering points for measuring economic, environmental, social and individual human well-being.

- ***Measures of Growth 2000*** developed produced by the **Maine Economic Growth Council** (State of Maine) area a set of 56 indicators of quality of life to measure progress towards explicit targets.

We also acknowledge the Alberta Government's 240 provincial government (ministry) performance measures (including "Measuring Up", the annual performance report of the Alberta Government). While these performance measures are useful at a provincial level they did not provide the comparative qualities of the FCM indicators as a basis for measuring and comparing quality of life and economic progress of the Capital Region against other Canadian municipalities.

A summary matrix comparing the above indicator frameworks is provided in a table in Appendix 2. The table reveals the diversity of indicators used by each community, each with their own unique set of quality of life and progress indicators. The diversity of indicators and absence of a common indicator set across communities suggests that each community defines quality differently. This creates a challenge for finding a common framework for comparing

municipalities across North America. While there may be common themes across communities, each community uses its own set of indicators, methodologies, and indicator criteria. To date, no attempts have been made to create a common set of North American quality of life indicators.

Therefore, the Alberta Capital Region could not be benchmarked against other U.S. communities, except in comparing general themes and, in some instances, common indicators. This is true of indicators developed by the Buffalo-Niagara Region and Pierce County, Washington.

Nevertheless, the inventory of indicators did provide a basis for establishing a framework of "Indicators of Success" and quality of life for the Capital Region.

Our analysis revealed that the most cost effective approach to developing an Alberta Capital Region indicator reporting system would be to consider the adoption of the following existing indicator initiatives:

- The FCM Quality of Life in Canadian Communities indicators
- The Edmonton LIFE (Local Indicators for Excellence) indicators
- The Edmonton Social Health Index

The FCM Quality of Life indicators initiative is of particular relevance for reporting on quality of life in the Capital Region since it provides a basis for comparing the Region against other Canadian municipalities in many key areas. While many of the FCM indicators are for the City of Edmonton only, some report on the basis of the Edmonton CMA, appropriate for the Capital Region. We believe the FCM indicators provide the best framework available as the basis for developing a customized Regional indicators framework in future. The FCM indicators have already been developed and would allow comparisons of the Edmonton Region with 15 other Canadian municipalities. The key question of whether the FCM indicators analysis could be modified to the scale of the Capital Region was examined in discussions with the FCM. Modification of the analytical boundary may be possible, however, it may prove costly. We instead recommend the consistent use of the Edmonton CMA as the geographic boundary by both the FCM and the Capital Region since most of the FCM indicators could be developed at the CMA level.

In addition, we strongly support the adoption of both the Edmonton LIFE and Edmonton Social Health Index indicators to augment the FCM Quality of Life Indicators. While these indicators are not directly comparable to other Canadian municipalities at present they do provide meaningful measures of quality of life for the Capital Region. Combining these sets of indicators would provide the broadest possible perspective on quality of life in the Region. As with the FCM indicators, the Edmonton LIFE and the ESHI indicators suffer from the same geographic limitations with a perspective that generally considers the City of Edmonton only. The Capital Region is fortunate to have all three indicator sets available and which compliment each other, with little overlap or duplication. We recommend combing all three indicator frameworks into a composite set of indicators for tracking all the key issues that constitute quality of life in the Region.

There may be other indicators that could be added to the suite. For example, indicators may be required to address the following issues:

- The strength of economic and sectoral diversity of the Region
- The overall sustainability (environmental, social, economic capital) of the Region
- The resiliency of the existing prosperity and quality of life of the Region.

This may require new indicators of composite indicators (clusters of individual indicators) to provide more macro overviews

We believe that in the interests of cost efficiency that these existing indicator initiatives be adopted and collaborative initiatives established with the FCM and the Edmonton Social Planning Council that currently administers the Edmonton LIFE and ESHI. We believe that these important reporting initiatives should be sustained and even enhanced with sufficient resources to sustain these indicator initiatives or find some process for placing them under one umbrella organization.

The use of indicators is important to provide information to decision makers for more informed and wise decisions for the well-being of citizens and the effective governance of the collective strengths of the Capital Region.

4.0 Characteristics of Good Indicators

There are several important characteristics of good indicators. These should be considered when selecting a set of indicators and establishing an indicator framework:

Relevant and Meaningful

- Fits the purpose for measuring (goals, desired outcomes)
- Reflects the most important factors and issues meaningful to the community
- Indicator provides a reasonable proxy for value being tracked
- Measure results, not just process

Understandable and Inclusive

- Easily understood by all citizens
- Citizenry are consulted and feel buy-in to the set of indicators

Practical and Timely

- Manageable number (i.e. not too many)
- Practical and affordable: not too complex nor expensive to monitor
- Data is available (now or in future), and on a timely (e.g. annual) basis

Reliable and Objective

- Trust in what the indicator shows
- Indicators that measure what it says it will be measured
- Objectively measurable
- Based on timely and reliable data
- Represent quantitative as well as qualitative attributes
- Can be consistently measured over time for assessing trends
- Monetary and non-monetary indicators
- Grounded in well-established theory

Useful

- Can be linked to desired outcomes, goals, objectives, or targets
- Shows the links among the economy, environment and society
- Focus on the long range view
- Comparable to other regions
- Tailored and usable by communities
- Useful to policy makers
- Can be integrated into decision making

5.0 "Indicators of Success": State of the Capital Region Reporting Framework

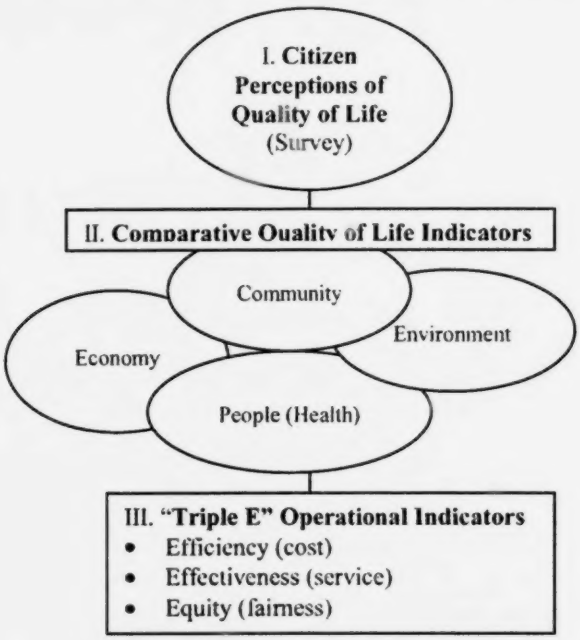
Based on our analysis of the various indicator framework options we recommend the following "Indicators of Success" state of the Region reporting framework. The following diagram represents the recommended framework for the Capital Region's quality of life and indicators of success framework, using three tiers of measures:

- Citizen-rated quality of life measures (based on citizen surveys of quality of life);
- Comparative Quality of life indicators (based on FCM, Edmonton LIFE and ESHI as the starting point for the basis for indicators), and;
- Triple E – efficiency, effectiveness and equity indicators of municipal service delivery.

The indicators contained in the three tiers of this framework provide a kind of "triple-bottom line" for the Capital Region: 1) perceived quality of life; 2) comparative quality of life indicators, and; 3) efficiency/effectiveness/equity of services and programs. These three tiers of indicators will provide a robust information base from which to manage growth, economic development, social responsibilities and environmental management. Balancing citizen perceptions with quantitative indicators of quality of life will provide a powerful basis for more effective management of the Region. Many indicator projects lack this balance between perceptions and quantitative reality.

Augmenting these two pillars are the Triple E indicators that will provide managers and municipal decision makers with information on the cost efficiencies and effectiveness (from the perspective of citizens) of municipal and Regional services. Comparing cost and service effectiveness data across municipalities in the Region will also help to identify differences and inequities. Identification of these gaps will allow all municipal governments in the Region to achieve more cohesive, cost-efficient and effective management of the collective assets of the Region that contribute to the Capital Region's strengths. The following diagram outlines the three tiers of indicators:

Capital Region Indicators of Success Framework



I. Citizen Perceptions of Quality of Life

Tier I level of indicators would solicit input from citizens as to their opinions and perceptions of quality of life, based on their experience living in their community and in the Capital Region. Qualitative indicators are important to understanding the perceptions of citizens. These qualitative indicators can then be compared to the objective, quantitative indicators of quality of life to determine gaps between perceptions and reality. Furthermore, the issues raised by citizens then become the key areas to monitor, report on performance and inform action by municipal governments.

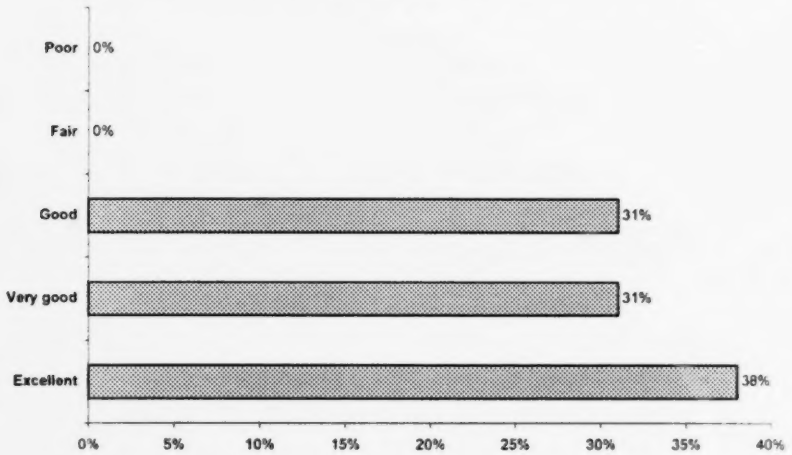
We recommend the use of an annual survey of citizens asking them the following questions:

1. Overall, how would you rate your overall quality of life?
2. What do you like about living where you are?
3. What don't you like about living where you are?
4. Identify areas that you feel need improving to make your life better?

On September 14, 2000 a group of 13 citizens, from across the Region and from various socio-economic and age groups, were asked to asked to engage in a dialogue around these four questions. Each participant was asked to identify quality of life issues and then rate their importance. The following collective results to the four questions posed are revealing.

Quality of Life

How would you rate your quality of life in the Capital Region?

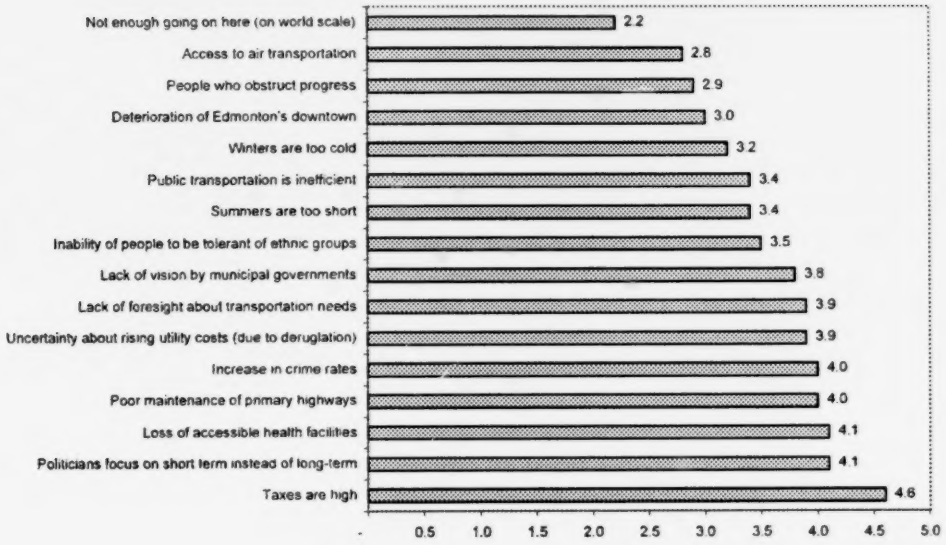


The following is a ranking from most important to least important of what the citizen group likes most about living in the Capital Region.

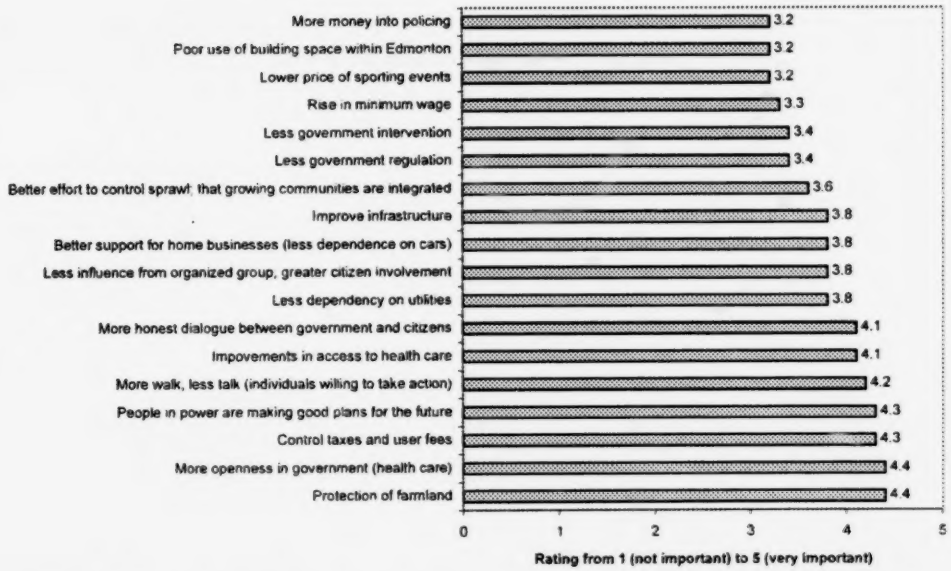
What do you like about living in the Capital Region and your community? (scale of 1 to 5, 1 important; 5 very important)	
Low crime rate	4.9
No worries about violence	4.9
Programs for kids (available and accessible)	4.8
Access to health care	4.7
Good clean environment (nature)	4.7
Medical emergency support	4.6
Community and neighbours	4.6
The way the community treats its children	4.5
Cleanliness	4.5
Choice of educational options	4.5
Access to green belt and walkways	4.5
Freedom of the individual choice	4.4
Community facilities	4.3
Well-planned communities	4.3
Tolerant community	4.3
Knowing my contribution to community has impact	4.2
Close access to urban and rural lifestyles	4.1
Good roadways and road services	4.1
Trails near my home	3.9
Country life (away from city bustle)	3.8
Familiar with neighbours (friendly)	3.8
"Picking strawberries"	3.8
Opportunity to contribute to my immediate neighourhood	3.8
Community knows what it wants in twenty years	3.7
Big trees	3.7
Knowing the people who run the municipality	3.6
Opportunity to find my "community"	3.6
Not close to businesses and shopping	3.2
Easy drive to work during rush hour	3.2
Low traffic congestion	2.5

The following charts show: 1) a ranking (in order of least important to most important) of what they like least about living in the Region, and 2) a ranking (in order of least to most important) of what they would like to have improved to enhance quality of life.

What we don't like about the Capital Region?
(rating on scale of 1 (not important) to 5 (very important)


Not enough going on here (on world scale) 2.2
Access to air transportation 2.8
People who obstruct progress 2.9
Deterioration of Edmonton's downtown 3.0
Winters are too cold 3.2
Public transportation is inefficient 3.4
Summers are too short 3.4
Inability of people to be tolerant of ethnic groups 3.5
Lack of vision by municipal governments 3.8
Lack of foresight about transportation needs 3.9
Uncertainty about rising utility costs (due to deruglation) 3.9
Increase in crime rates 4.0
Poor maintenance of primary highways 4.0
Loss of accessible health facilities 4.1
Politicians focus on short term instead of long-term 4.1
Taxes are high 4.6
- 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0

What areas do you feel need improvement?


More money into policing 3.2
Poor use of building space within Edmonton 3.2
Lower price of sporting events 3.2
Rise in minimum wage 3.3
Less government intervention 3.4
Less government regulation 3.4
Better effort to control sprawl: that growing communities are integrated 3.6
Improve infrastructure 3.8
Better support for home businesses (less dependence on cars) 3.8
Less influence from organized group, greater citizen involvement 3.8
Less dependency on utilities 3.8
More honest dialogue between government and citizens 4.1
Impovements in access to health care 4.1
More walk, less talk (individuals willing to take action) 4.2
People in power are making good plans for the future 4.3
Control taxes and user fees 4.3
More openness in government (health care) 4.4
Protection of farmland 4.4
0 1 2 3 4 5
Rating from 1 (not important) to 5 (very important)

The results of this initial survey of the opinions and impressions of quality of life in the Capital Region provides an important benchmark for conducting future quality of life surveys of citizens across the Region. The results are significant in many respects:

1. They reveal that citizens are largely content and have less to complain about quality of life;
2. They consider personal safety, children, and a clean environment as the most important issues contributing to quality of life; and yet they are also most concerned about increasing crime rates (note that actual crime rates while high in Canada have fallen in the 1990s);
3. They consider that high taxes, politicians who lack a long-term vision, and loss of access to health facilities detract from their quality of life;
4. They want to see protection of farmland (from urban sprawl), more openness in government and better control of taxes and user fees.

Most surprising us was the importance of local governance and leadership to quality of life. We also found inconsistencies between people identifying low crime rates as a positive contributor to quality of life while at the same time concerned about an increase in crime rates.

The list of positive contributor to quality of life far outweighed the negative aspects. This suggest that overall these citizens, at least, were relatively satisfied with life in the Region. Perhaps the most important benefit of the citizen accrued to the participants themselves who enjoyed a chance to meet other citizens face-to-face and share opinions and experiences as to what contributes or detracts from quality of life.

The benchmark survey we conducted on September 14th revealed a rich source of information to guide Regional and municipal governance in future using a process that engages citizens directly. Self-rated quality of life indicators will be important drivers of Regional and municipal public and fiscal policy since they identify areas that need improvement as well as areas of quality of life that need to be maintained. These perceptions by citizens can be compared to quantitative (comparative) indicators of quality of life.

We recommend the adoption of citizen quality of life satisfaction surveys, either using the focus group approach or telephone surveys. The former, while more expensive to administer, provides an opportunity for citizens to interact, build community and provide direct feedback to political leaders on what is most important to them. Open-ended questions can also be used to solicit a list of issues as we did in the September 14th session. Telephone surveys, on the other hand, are more cost efficient to administer but lack the intangible benefit of coming together in a dialogue. They also often require a prescribed list of issues for citizens to respond to over the telephone. Another approach is that used by Canterbury, New Zealand.

1. The Canterbury, New Zealand Quality of Life Survey

The community of the Canterbury (which includes the City of Christchurch), New Zealand conducts similar quality of life surveys. Citizens are asked the same four questions used in the Edmonton September 14th citizen forum. The Canterbury initiative, called "indicate = your future" and produced by "Canterbury Dialogues" (www.canterburydialogues.org.nz), is an independent initiative of the Canterbury region (which includes Christchurch) whose aim is to measure progress towards a sustainable future. The Canterbury "indicate" initiative serves as a model of one of the most innovative approaches to soliciting citizen feedback. The first survey was conducted through the regional newspaper "The Press" in April 1999 to gauge citizen perceptions on quality of life issues in the city of Christchurch and the region. Citizens were asked open-ended questions about what they like and don't like about living in the region. From the list of issues a scoring of the most common issues was derived. These categorized issues were then reported back to citizens in the form of a small report card to citizens distributed to all households and published in "The Press." The survey technique yielded a tremendous response

(869 respondents) with 82% from Christchurch, 11% from rural areas and 7% from towns in the region. The Canterbury region is similar to the Capital Region in terms of the distribution of population by cities, towns and rural communities. The Canterbury Dialogues initiative has now expanded where quantitative indicators are being developed and reported along the lines of the quality of life issues raised in the survey.

2. The City of Edmonton Citizen Satisfaction Survey

The City of Edmonton has conducted two consecutive surveys (1999, 1998) of residents ratings of the quality of life and overall satisfaction with services provided by the City that also serve as a useful benchmark for other municipalities in the Region and for the Capital Region as a whole. An independent research firm was contracted to conduct 800 telephone interviews using a random sampling process.

The results for 1999 show that 93 per cent of Edmontonians believe quality of life in Edmonton is excellent, very good or good (see table). These results are consistent with the September 14 focus

In general how would you rate the quality of life in the City of Edmonton?		
	1999	1998
Excellent	16%	16%
Very Good	47%	47%
Good	30%	31%
Fair	6%	5%
Poor	1%	1%

group where 100% of citizens rated quality of life as excellent, very good or good; however, the ratings of excellence were significantly higher with the focus group.

3. Quality of Life Survey for the Capital Region

The Canterbury regional quality of life indicator initiative may serve as a model for the Alberta Capital Region. An annual survey could be conducted based on a statistically valid sample size (roughly 1,300 citizens) from across the Capital Region. There are several options for collecting this information:

1. **Newspaper survey**: a first survey could be conducted like the Canterbury initiative, through local newspapers, using open-ended questions (as shown above) to produce a list of the key quality of life issues. . The survey responses could be emailed, faxed or surface-mailed then analyzed to produce a list of quality of life issues. The survey respondents would be asked to note the name of their community to yield results that are relevant at the individual municipal community level and for the Region as a whole.
2. **Telephone interviews**: this is a more traditional approach but is becoming more challenging to administer given citizen saturation with telephone solicitation. Open-ended or a pre-selected list of quality of life issues could be used.
3. **Citizen focus-group sessions:** similar to the September 14, 2000 session. An open-ended approach to soliciting input is recommended though with multiple focus groups a pre-selected list of common issues may be used to solicit responses.
4. **Municipal quality of life surveys:** individual communities may wish to administer their own quality of life surveys of citizens. If municipalities agreed to a common set of questions (for example, as per above) and methodologies for gathering quality of life information then a large sample size of quality of life ratings would result of value to each municipality and to the Region. The City of Edmonton has conducted a quality of life survey for two consecutive years asking citizens to self-rate their quality of life rate the quality and value of municipal services. One option is to replicate the City of

Edmonton's survey in other municipalities plus add additional questions about issues that contribute and detract from quality of life and identify areas requiring improvement, which the Edmonton survey lacks.

From our experience with the September 14, 2000 session, we feel there is tremendous value for citizens to come together, face-to-face, from a variety of socio-economic backgrounds to discuss these issues. The key differences between the three possible approaches are cost with the latter approach being the most expensive, yet possibly yielding the most meaningful results. Each municipality may wish to conduct citizen focus group sessions, similar to the pilot focus group session conducted on September 14, 2000 in Edmonton

The question of methodology is important, whether to provide citizens with open-ended questions (asking citizens to list the key issues) or to use a check-off list. There are two possible approaches to conducting this survey:

I. Open-ended survey where citizens are asked to list issue of most importance to them and the results collated along common themes.

II. A pre-assigned, check-off list of quality of life issues (based on a pre-test, sample of a smaller group of citizens similar to the September 14, 2000 citizen focus group session).

There are strengths and weaknesses to both approaches. The first approach is more costly however; it does provide intangible benefits to citizens who find it meaningful to engage with fellow citizens in a discussion on quality of life in their communities. The open-ended approach to soliciting input may also have drawbacks in terms of tracking trends over time, if issues change from one survey period to the next. The second approach is less costly, is easier for citizens to complete, and is easier to administer data. However, this approach lacks the value of having citizens engaged in a dialogue on quality of life and may preclude some issues (not on the list) from being identified. The second approach may introduce survey bias by the designers who must select the questions and thus constrain the responses.

II. Comparative Quality of Life Indicators

Based on an assessment of a number of comparative quality of life indicators using four clusters of indicator:

- people (health and wellness)
- community (society)
- economy
- environment

There is no ideal framework for measuring quality of life given the complex nature of well-being. Some may disagree with the clustering of indicators according to the above four categories. Any framework should be flexible and meaningful to citizens and decision makers. The four clusters align with the four regional frameworks:

- economic development
- social responsibility
- environmental management
- growth management

Quality of life indicator frameworks are increasingly being considered across Canada, most recently the Federation of Canadian Municipalities quality of life indicators for 16 municipalities, including Edmonton (city and CMA).

We believe that quality of life must consider a balance between health, social, economic and environmental components avoiding any bias in the importance of any given sphere or indicators within the framework. Quality of life is a complex issue, in part defined by the perceptions of citizens (qualitative data) and in part defined by a set of quantitative indicators using traditional measures.

The table comparing the best frameworks of potential application for the Capital Region provides an important picture of the diversity of indicators being used in various North American communities compared to those currently available for Edmonton and the Capital Region. What is immediately apparent is that there may already exist a set of indicators and data set that could be used to measure certain aspects of quality of life in the Region, however, these are currently focused either on the City of Edmonton or on the Edmonton CMA.

The other significant issue is that most data is not available at the detail of the individual municipal level by traditional sources such as Statistics Canada. If indicators were desired at the individual municipal level in the Region then considerable resources would be required to develop a benchmark data set and an ongoing survey. We feel this would less desirable than adopting an accounting stance that considers the quality of life of the Region as a whole using exist indicators and data sources. What is required is to begin working with existing quality of life indicator agencies, like FCM and ESPC (Edmonton LIFE and ESHI), to examine how to broaden their analysis to consider the Capital Region beyond the City of Edmonton and Edmonton CMA. We recommend working with these agencies to scope out the capacity of their existing initiatives to expand or calibrate their measurement efforts to accommodate the needs of the Capital Region for quality of life indicators.

We believe that the three set of indicators on quality of life most relevant for the Capital Region and can be immediately reported as a benchmark for future comparison include:

1) the FCM Quality of Life indicators and reporting system;
2) Edmonton LIFE (Local Indicators for Excellence) and;
3) the Edmonton Index for Social Health.

1. The Federal of Canadian Municipalities Quality of Life Indicators

In 1997, the Federation of Canadian Municipalities (FCM) set out to answer these questions. Through the Quality of Life project, it developed a set of indicators to measure quality of life in Canada's cities. FCM's goal is to develop a global picture of living conditions within Canadian cities and identify trends and issues that might escape traditional measures of public policy outcomes. Together, these indicators amount to a report card on the quality of life in urban Canada called the Quality of Life (QOL) Reporting System.

The QOL Reporting System has evolved from a desire to bring a community-based perspective to the development of public policy and to monitor the consequences of changing demographics, shifting responsibilities and new fiscal arrangements. By providing a framework to monitor quality of life, the report card is of value to Canadian communities and all orders of government as a tool to:

- identify and raise awareness of issues affecting quality of life in Canadian communities;
- strengthen policies and resources aimed at improving quality of life; and

- establish municipal governments as a strong and legitimate partner in public policy debate in Canada.

The QOL Reporting System also provides municipal governments with a valuable national forum for sharing experience and expertise. As a result, a strong network of municipal leaders and staff has been established.

A working with a team of officials from 16 participating municipal government representatives (including a representative from the City of Edmonton) developed a set of eight indicator clusters of quality of life. These clusters and respective measures per cluster include:

1. Population Resource Measures
    a. Population by sex and age
    b. Population and migration measures
    c. Level of schooling

2. Community Affordability Measures
    a. Community affordability measures (cost of living)
    b. Cost of living and income indices
    c. Percentile of family incomes from all sources
    d. Cost of one pass on public transportation
    e. Government transfer income as a percentage of total community incomes, by family type

3. Quality of Employment Measures
    a. Labour force characteristics
    b. Permanent, temporary and self-employed workers
    c. Percent receiving employment insurance and social assistance
    d. Median hourly wages
    e. Percent of unemployment which is long-term
    f. Employment income as percentage of total income

4. Quality of Housing Measures
    a. Quality of housing measures

5. Community Stress Measures
    a. Percentage of lone-parent families
    b. Economic incidence of low income
    c. Teen fertility rate per 1,000 women 15-19 years
    d. Suicide rate per 100,000 population
    e. Business bankruptcies per 1,000 establishments
    f. Consumer bankruptcies per 1,000 population

6. Health of Community Measures
    a. Infant mortality per 1,000 live births
    b. Percentage of single births less than 2,500 grams to total single births
    c. Crude premature mortality rates per 100,000 population
    d. Hospital discharges, crude rate per 100,000 population
    e. Hours lost (full or part week) due to illness or disability as percentage of actual hours worked

7. Community Safety Measures
    a. Crime rate per 100,000 population

b. Crude mortality rates per 100,000 population
c. Hospital discharge rates per 100,000 population due to injury or poisoning

8. Community Participation Measures
    a. Percentage of voter turnout, municipal, federal elections
    b. Charitable donations
    c. Per capita donations to the United Way
    d. Percentage of households receiving daily newspapers
    e. Tonnage of collected recyclable goods per resident

The report on the quality of life is being developed through a multi-phased approach. The first phase involved generating baseline quantitative measures of quality of life. Later phases will involve complementing and verifying these through a series of qualitative measures. The technical team will also review and refine existing indicators and incorporate new measures in the economic and environmental domains.

The goal will be to publish annual snapshots of social and economic conditions in Canadian cities. Taken together, they will provide a compelling picture of quality of life in this country.
Technical Team — Participating Municipal Governments:

1. Halifax Regional Municipality
2. Regional Municipality of Waterloo
3. Regional Municipality of Ottawa-Carleton
4. Regional Municipality of York
5. Regional Municipality of Peel
6. Regional Municipality of Hamilton-Wentworth
7. City of Toronto
8. City of London
9. City of Windsor
10. City of Winnipeg
11. City of Saskatoon
12. City of Regina
13. City of Edmonton
14. City of Calgary
15. City of Burnaby
16. City of Vancouver

2. Edmonton LIFE (Local Indicators for Excellence)

The Edmonton LIFE: Local Indicators For Excellence, is a collaborative, on-going project, which measures the local quality of life. The purpose of the project is to provide an accessible and comprehensive annual report measuring health, environmental, economic and social indicators. The report will be reviewed and revised on an annual basis. This will promote standards of excellence and demonstrate the city's long-term commitment to enhancing quality of life.

Many different factors work together to establish and sustain quality of life in a city. Prior to measuring Edmonton's quality of life, it was necessary to list the variety of factors that supported the city's well-being. The basic beliefs, elements and a vision statement were developed to capture this information. This information provided the groundwork for the following sections.

The Edmonton LIFE report is divided into four elements: Healthy Economy, Healthy Community, Healthy Environment and Healthy People. Previously, various groups in the

community have focused on monitoring and evaluating specific sectors. Edmonton LIFE has brought these sectors together as part of an overall assessment of progress. A variety of indicators have been identified for each section to create a comprehensive, bench-marking report.

Each of the four sections begins with an overview and follows with a set of indicators. The overview provides background information for each section and describes the context for the indicators. The purpose of the indicators is to provide measures which gauge quality of life. Each indicator includes a brief description, rationale, directionality, qualifications and status.

Indicators for a Healthy Economy

Edmonton LIFE has developed 11 indicators for measuring economic health. It was determined that a healthy economy combines individual economic well-being and community economic health. External factors also affect this element through changes in technology, markets and international affairs. The extent to which Edmonton's economic well-being is affected by the national and international economy can be mitigated by monitoring and strengthening the local economy. **Healthy economy** indicators are as follows:

- Net Business Creation
- Development Activity
- Municipal Expenditure on Debt
- Emerging Industry Research and Development Patents
- Labour Force Participation
- Adult Job-Related Education and Training
- Level of Education
- Households Below the Low Income Cut-Off Level (LICO)
- Air Traffic
- Corporate Revenue Spent on Training
- People With Income to Meet Basic Needs

Indicators for Healthy People

To assess the health of people in the community, Edmonton LIFE developed 11 indicators. One of the challenges in this section was deciding how to balance economic needs with humanistic needs. It was determined that healthy people are the result of all the various components of a community working well together (economy, environment and community). This resulted in the following list of indicators:

- Disparity in Family Annual Income
- Nutritious Food Basket Index
- Low Birth-Weight Infants
- Student Academic Achievement
- Life-Long Learning
- Physical Activity
- Food Bank Demand
- Premature Deaths
- Crisis Support Calls
- Consumption and Use of Addictive Substances
- Pre-School Children With Developmentally-Appropriate Behavior and Skills

Indicators for a Healthy Environment

To monitor the city's environmental health, Edmonton LIFE developed 11 indicators, which monitor change and development. Topics range from environmental education levels to measuring air and water quality. These indicators will enhance informed decision-making while managing the city's natural resources and environment. The list of environmental indicators includes:

- Private Vehicle Usage
- Energy Consumption Per Capita
- Air Quality
- River Water Quality
- Solid Waste Per Capita
- Urban Green Space
- Environmental In-Service Training for Teachers
- Environmental Content in the Classroom
- Community Design
- Total Air Emissions
- Public Environmental Awareness and Satisfaction

Indicators for a Healthy Community

In order to assess Edmonton's community health, Edmonton LIFE needed to determine which indicators enhance and foster community well-being. The process began by developing several concepts, which outline and describe healthy communities. Eleven measurable indicators were developed from the conceptual data ranging from infrastructure assessment to city crime rates. The complete list of indicators is as follows:
- Enrollment in Post-Secondary Institutions
- Charitable Donations Per Capita
- Voter Turnout
- Public Safety and Security
- Physical Urban Infrastructure
- Suicide Rates
- Access to Medical Services
- Number of Hospital Beds
- Volunteer Time
- Leisure Activities
- Early Intervention to Assist Children

In some sections, indicators did not include a status report due to the lack of measurable information. It was decided to retain such indicators due to their ongoing value to the quality of life. It is also believed that these indicators will become measurable in the future. Non-measurable indicators are listed at the end of each section. This project sets an example for communities across the country by embracing excellence and monitoring healthy growth and change.

3. The Edmonton Social Health Index (ESHI)

The Edmonton Social Health Index was developed by the Edmonton Social Planning Council to track trends in the social health of Edmonton. The ESHI is composed of 15 indicators of social, health, and economic and other indicators:

1. Life expectancy
2. Premature deaths
3. Low birth-weight babies

4. Teen birth rate
5. Suicide rates
6. Crisis support calls
7. Incidence of STDs
8. Child welfare case loads
9. Foodbank use
10. Percent of economic families in poverty (living below LICO – low income cutoff)
11. Single parent households
12. Personal bankruptcies
13. Property crime rates
14. Reports of domestic violence

These indicators provide a time series from 1993 (benchmark year) to 1998. Each indicator's raw data set is then converted to a normalized index using 1993 as the benchmark year converted to 100 basis points. All indicators can then be added up assuming equal weighting to yield a composite index of all 15 individual indicators. The following table shows the raw data for each of the 15 indicators in the ESHI.

Edmonton Social Health Indices, 2000

	1 Life Expectancy	2 Premature Deaths	3 Low Birth Weight Babies	4 Teen Birth Rate	5 Suicide Rates (per 100,000)	6 Crisis Support Calls	7 Incidence of STDs	8 Child Welfare Caseloads
		per 100,000	(percentage of live births)	(per 1,000 females 15-19 yrs)		(per 100,000)	(City of Edmonton, per 100,000)	(per 100,000)
1993	79.33	321.76	5.6	31.90	21.9	5,128	442	433
1994	78.86	327.11	5.9	35.54	18.5	5,179	442	446
1995	79.14	307.25	6.1	32.03	18.2	4,625	397	510
1996	79.54	317.04	6.4	29.47	20.8	4,682	421	600
1997	*79.54*	300.24	6.5	27.09	15.6	4,451	402	654
1998	*79.54*	314.06	6.5	25.53	15.6	3,631	405	673

Source: "Tracking the Trends: Social Health in Edmonton", Edmonton Social Planning Council, June 2000
Notes: italicized figures are estimates or forecasts

9 Foodbank Use	10 Percent of Economic Families Below LICO	11 Single Parent Households	12 Personal Bankruptcies	13 Property Crime Rate	14 Violent Crime Rate	15 Reports of omestic Violen
(per 100,000)		(% of total economic households)	(per 1,000 pop.)	(per 100,000)	(per 100,000)	(per 100,000)
19,622	19.0%	10.46%	2.2	10,354	1,723	285
27,115	17.2%	9.39%	2.5	8,724	1,418	278
30,262	18.3%	10.77%	3.9	8,073	1,351	241
35,234	14.2%	9.64%	5.1	8,039	1,361	272
30,658	13.8%	8.24%	7.7	8,199	1,379	350
29,604	*13.8%*	*8.24%*	6.1	7,813	1,472	286

4. Nichols Applied Management Regional Economic and Financial Indicators

As part of the Governance Review project, Nichols Applied Management, completed (January 2000) an analysis of regional economic and financial indicators comparing the Capital Region (Edmonton CMA) with nine other Canadian Census Metropolitan Areas (CMAs). They examined the historical trends in the following indicators:

a. Population growth
b. Employed labour force growth
c. New business formation
d. Value of building permits
e. Value of non-residential building permits
f. Average household income
g. GDP (economic growth)

The relative position (rank) of the Edmonton CMA relative to the nine other CMAs is included in the Comparative Quality of Life indicators table (p. 33).

5. Strengths and Weaknesses

There are several strengths and weakness of all three sources of indicators. The FCM indicators provide the strength of a common set of indicators to compare the Greater Edmonton region with other Canadian municipalities and regions. However, the FCM indicators are not necessarily applicable at the Capital Region level; in some instances Edmonton CMA data , in other cases data is shown for the City of Edmonton only. According to Terry Hunsley (Advocate Institute; 613-235-1402, ext. 613) the consultant who helped develop the FCM Quality of Life indicators, Edmonton CMA data is available for most of the indicators they have developed. Thus it would be possible to conduct a special Statistics Canada data query for the Edmonton CMA for developing the Alberta Capital Region indicators.

We recommend working with the FCM in future using the Edmonton CMA regional boundaries for development of their Quality of Life indicators. The alternative, to request a special run by Statistics Canada for the unique Alberta Capital Region boundary, would be a costly option and would not likely provide any less meaningful information than that provided through the Edmonton CMA regional lens.

Both the Edmonton LIFE and the Edmonton Social Health Index indicators provide additional indicators of importance to quality of life metrics. However, like the FCM measures, both the Edmonton LIFE indicators and ESHI indicators are generally only applicable to the City of Edmonton.

These weaknesses should not, however, preclude the development of a Regional indicator accounting stance with an examination of the options for such accounting with the FCM, the Edmonton Social Planning Council and statistical agencies like Statistics Canada. Understanding that such an expanded accounting stance may require additional resources and costs to the Region governance organizations.

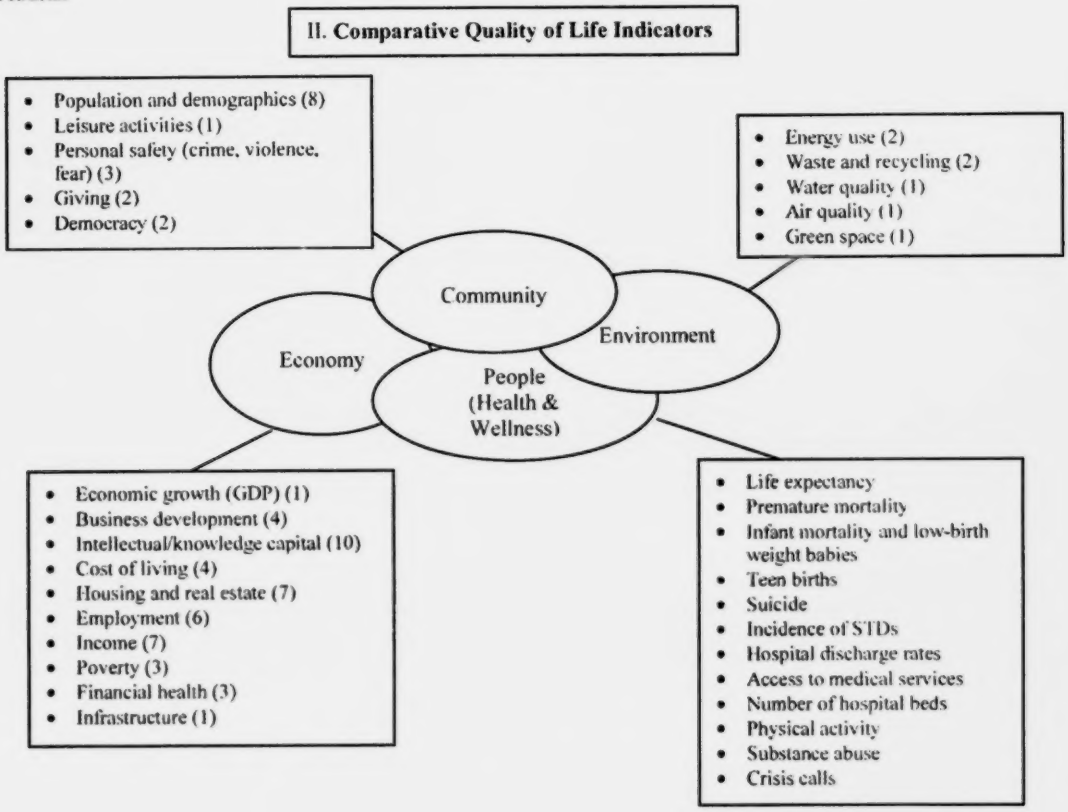
These limitations should not, in our opinion, preclude presenting these existing indicators as a benchmark for future indicator development. Indeed, they provide, in the case of the FCM indicators, a meaningful starting point for comparing the Edmonton (and Greater Edmonton) area with other Canadian municipal benchmarks.

Another issue raised is that ideally indicators should be valid at the individual, household (family), community/neighbourhood, municipal and regional level. Indicators might also be

sensitive to socio-economic, age-sex profiles, as much of the FCM data already does. The distributional effect is important and should be tracked.

6. Comparative Quality of Life Indicators Framework

Using the combined measures from the FCM, Edmonton LIFE and ESHI indicators we have developed a rough framework of indicators clustered according to four themes: economy, community (society), people (health) and environment. The framework provides the basis for comparing the Alberta Capital Region with 15 other Canadian municipalities or municipal regions. As noted, the current FCM indicators are a mixture of City of Edmonton and Edmonton CMA regional indicators, which could be modified to consider Edmonton CMA only. In the case of the Edmonton LIFE and ESHI indicators we can only show the Edmonton/Greater Edmonton results.



We have selected and compared Edmonton with Calgary, Ottawa-Carleton, Toronto, Winnipeg, Regina, Vancouver, and in some cases Canada (where data is relevant). This short-list of the 15 other Canadian municipalities was done only in the interest of space. The table provides an important benchmark for comparing the Edmonton region with other municipalities and includes other measures from Edmonton LIFE and ESHI that are not included in the FCM indicators framework.

Unfortunately there is no easy way to compare the Capital Region or Edmonton with other U.S. benchmark communities given the incomparability of indicator frameworks. There is no North

American clearinghouse for comparing standardize quality of life indicators. The FCM initiative is one of the first for comparing quality of life at the community level. This would preclude us from providing a meaningful comparison of the Alberta Capital Region with other U.S. communities except in some selected indicators. Any comparisons must be sensitive to differences in statistical sources and methodological differences. If comparison with other U.S. communities is desirable then rigorous comparative, analytical work is required which is beyond the scope of this study.

The clustering of indicators according to the four quality of life spheres of Economy, Community, People (health and well-ness) and Environment is based on what would seem like natural clusters. There is no common standard for indicator clustering.

The following framework provides a starting point and benchmark from which to build a working indicators framework for the Capital Region. New indicators might be added or others removed based on the needs of the Capital Region to measure quality of life.

Table 1: Alberta Capital Region
Comparative Quality of Life Indicators Framework:

The following grid compares quality of life indicators for the Capital Region (Edmonton CMA), Calgary, Vancouver, Toronto, Ottawa-Carleton. Sources of data includes Edmonton LIFE (local indicators for excellence), the Edmonton Social Health Index and the "Quality of Life in Canadian Communities" indicators developed by the Federation of Canadian Municipalities (FCM) for 16 large urban centers. The FCM indicators provide the most meaningful benchmarks for comparing the Capital Region (Edmonton CMA) with 16 Canadian municipalities. This grid compares the FCM indicators for Edmonton CMA, with Calgary, Ottawa-Carleton, Toronto, Winnipeg, Regina, Vancouver and Canada (average). In addition, indicators from Edmonton LIFE and the Edmonton Social Health Index, both developed by the Edmonton Social Planning Council, are also shown to provide a complete set of quality of life indicators.

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**[2]	**Federation of Canadian Municipalities (FCM) Indicators**							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Economic growth (GDP)[3], 2000 forecast Edmonton CMA rank amongst 10 Canadian CMAs		#2							
Business and Commerce Indicators									
Net business creation (# new businesses established less businesses retired per annum) 1997 1996	 835 1,361								

[2] Both Edmonton LIFE and Edmonton Social Health Index (ESHI) indicators are combined in this column: figures marked with ** are from the ESHI indicator set.
[3] Source: Nichols Applied Management, January 2000, based on Conference Board of Canada data set.

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**[2]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Development activity, 1997 Commercial Industrial Institutional Miscellaneous (temporary structures) Housing Starts (City of Edmonton)	 1,092 198 142 908 3,015								
Growth (%) in number of businesses (rank amongst 10 Canadian CMAs,, 1990 to 1999)		# 6							
Value of building permits (Edmonton CMA rank amongst 10 Canadian CMAs,1998)[4]		# 3							
Value of non-residential building permits (Edmonton CMA rank amongst 10 Canadian CMAs, 1998)[5]		#2							
Air traffic (number of passengers through Edmonton) 1997 1996	 3,522,674 3,720,623								

[4] Source: Conference Board of Canada and Economic Development Edmonton, developed by Nichols Applied Management.
[5] ibid

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**[2]	**Federation of Canadian Municipalities (FCM) Indicators**							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Emerging industry research and development									
- research program funding ($ million)									
o 1997/98	$130 mill.								
o 1996/97	125								
o 1995/96	115								
- employment from sponsored research									
o 1997/98	7,900								
o 1996/97	5,900								
o 1995/96	5,400								
- employment from spin-off companies									
o 1997/98	3,640								
o 1996/97	3,120								
o 1995/96	3,265								
Intellectual Capital & Education Indicators (Highest level of schooling, % of total population)[6]									
Less than Grade 9		7.9	5.5	6.1	12.2	9.1	7.9	10.4	12.1
Grades 9-13 without secondary school graduation certificate		23.9	21.5	16.7	20.1	26.0	25.6	17.4	22.7
Grades 9-13 with secondary school graduation certificate		11.3	11.4	13.4	12.8	11.6	12.0	10.5	14.3
Trades certificate or diploma		3.2	2.9	2.4	2.6	3.1	2.8	1.9	3.7
Other non-university education only		27.0	27.2	22.8	20.5	21.6	20.6	22.3	24.2
University without bachelor's degree or higher		11.0	12.8	12.8	11.3	13.5	16.3	13.9	9.7
University without bachelor's degree or higher		15.6	18.7	25.8	20.5	15.1	14.8	23.6	13.3

[6] See Table 1.3a FCM Quality of Life Reporting Systems; Source 1996 Census (special tabulation)

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices*•2	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Enrolment in post-secondary institutions (1997/98 only), full-time and part-time									
• University of Alberta	29,836								
• Grant MacEwan	7,235								
• NAIT	9,435								
• Alberta Vocational College	4,098								
• Concordia University Collage	1,266								
• King's University College	503								
Adult job-related education and training, 1993, Edmonton CMA									
• Total education and training activities	345,600								
• Job-related education and training activities	256,400								
• Employer sponsored adult education/training	205,400								
Student academic achievement * detailed breakdown of percentage of students in grades 3, 6, 9 and 12 achieving acceptable standards in all subject areas (see #3.4 p. 22 of Edmonton LIFE 1998 report)	*								
Cost of Living Indicators									
Community Affordability Measure 1 (CAM1) = Median Income of Population/Average Cost of Living[7], 1996		1.13	1.19	1.26	0.96	1.09	1.22	0.84	N/A
Community Affordability Measure 2 (CAM 2)= Median Income of Modest-Income Population/Average Cost of Living[8], 1996		1.13	1.19	1.21	0.87	1.18	1.26	0.76	N/A

[7] See Table 2.1a&b FCM QofL Report; CAM1 is calculated based on median incomes of the total population. The higher the value of the CAM, the more affordable the urban centre. Costs of living are estimated by the FCM Local Pricing Exercise.

[8] See Table 2.1a&b FCM Qof L Report; CAM 2 expresses the value for the modest-income population (the half of the population that is below the median).

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**2	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Cost of nutritious food basket, 1997 (average weekly costs by age and sex)									
Children 0-6	$18.99								
Boys 7-18	30.97								
Girls 7-18	26.63								
Men 19-75+	30.44								
Women 19-75+	25.39								
Pregnant women	29.82								
Public Transit Affordability (1999)									
Minimum wage		$5.00	$5.00	$6.85	$6.85	$5.40	$5.60	$7.15	N/A
Cost of bus/subway		$1.60	$1.60	$2.25	$2.00	$1.50	$1.20	$1.88	
Cost as % of minimum water		32%	32%	32%	29%	28%	21%	26%	
Housing Indicators									
Median family income as a percentage of average value of dwelling		35.2	34.1	33.3	19.8	47.9	57.2	10.1	30.3
Median non-family person income as percentage of average rent of a 2-bedroom apartment		35.9	36.6	41.2	52.5	40.9	32.9	56.3	N/A
Average rent on a 2-bedroom apartment as a percentage of median family income		13.9	13.9	15.4	20.4	14.9	11.8	24.7	N/A
Gross rent spending: 30% or more of household income on shelter costs, 1996		40.9	37.9	41.2	44.8	43.5	39.6	47.2	43.0
Substandard units as a percentage of total occupied private dwellings		6.4	5.5	6.8	9.1	8.9	7.2	8.4	8.3
Residential Property Tax									
1996, $ per capita		250	N/A	474	612	333	612	N/A	N/A
1991, $ per capital		225	N/A	408	N/A	284	456	N/A	N/A
Real Estate Sales, per capita									
1997		2,064	3,114	1,684	5,658	1,373	1,330	N/A	N/A
1991		2,020	2,789	1,778	4,660	1,313	933	N/A	N/A

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices••2	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Employment Indicators									
Employed labour force growth (rank amongst 10 Canadian CMAs, 1998)[9]		# 4							
Labour force participation rate 1997 1996	 71.7% 70.4%								
Employment rate (%), by age group, 1996[10] 15-24 years 15-39 years 40+ years		 54.1 71.1 52.9	 60.9 75.9 58.8	 54.8 68.1 53.3	 44.8 66.2 46.5	 59.4 73.2 49.4	 57.4 72.8 53.8	 47.3 68.6 50.2	 51.6 67.9 49.9
Unemployment rate (1996) by age group 15-24 years 15-39 years 40+ years		 15.1 9.6 8.2	 12.9 8.0 6.3	 11.3 9.8 5.9	 14.6 11.4 8.5	 14.1 9.6 7.1	 13.9 8.4 3.9	 14.1 9.4 8.3	 16.1 11.4 7.5

[9] Source: Statistics Canada, compiled by Nichols Applied Management
[10] See Table 3.1 FCM Quality of Life Reporting System: Source: Labour Force Survey, Statistics Canada (Special Tabulations)

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**2	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Permanent, Temporary and Self-Employment (as % of employed age group, both sexes), 1997									
15-24 years									
Permanent Employees		74.6	79.8	66.1	73.9	73.2	68.4	78.5	69.4
Temporary Employees		20.6	13.6	25.3	22.4	21.1	24.1	16.6	22.8
Self- Employed		5.0	6.7	8.6	3.7	5.8	7.5	4.9	7.9
15-39 years									
Permanent Employees		77.6	80.4	77.8	81.7	79.6	80.0	78.8	76.4
Temporary Employees		9.7	8.7	12.6	11.4	12.8	12.5	11.0	12.8
Self- Employed		12.7	10.9	9.7	6.9	7.6	7.5	10.2	10.8
40+ years									
Permanent Employees		71.5	76.6	78.4	78.3	83.2	80.7	77.2	75.5
Temporary Employees		5.9	4.7	5.5	6.0	6.0	6.1	5.9	6.7
Self- Employed		22.7	18.7	16.2	15.7	10.8	12.7	17.1	17.8
Labour force replacement ratio[11]		0.97	0.96	0.91	0.85	0.97	1.06	0.61	0.97

[11] The ratio of the number of children (aged 0 to 15 years) to the number of people expected to leave the labour force over the next fifteen years. A ratio less than 1.0 suggests that there are insufficient youth to replace retirees in future.

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Permanent, Temporary and Self-Employment as % of population, % of total employed, 1997, by age and both sexes[12]									
15-24 years									
- permanent employees		74.6	75.2	69.4	78.1	74.2	70.3	78.7	69.0
- temporary employees		20.6	18.4	22.6	10.8	20.9	23.6	13.8	23.3
- self-employed		5.0	6.4	7.9	11.1	4.9	6.7	7.5	7.7
15-39 years									
- permanent employees		77.6	78.1	77.3	78.1	79.4	79.1	75.7	75.0
- temporary employees		9.7	9.5	11.6	10.8	12.1	12.5	9.4	12.3
- self-employed		12.7	12.4	11.1	11.1	8.5	8.5	15.0	12.8
40+ years									
- permanent employees		71.5	71.0	75.4	72.7	78.1	76.9	69.5	70.3
- temporary employees		5.9	4.5	3.9	4.5	4.7	4.1	3.9	5.6
- self-employed		18.1	24.5	20.7	22.7	17.2	19.0	26.6	24.0
Percent of unemployment which is long-term[13]									
Both sexes									
15-24		9.9	6.9	9.9	8.3	8.5	7.4	11.3	12.5
15-39		13.8	13.8	17.6	20.5	13.9	13.5	20.1	20.5
40+ years		29.2	29.2	40.1	34.5	33.2	42.4	34.0	34.0

[12] Table 3.2b in FCM report; Source: Labour Force Survey, Statistics Canada. Note: this table also includes figures for males and females which were left out of the table presented here. Statistics Canada defines "permanent" as those persons who expect to be with their current employer for at least the next six months.
[13] Table 3.5a in FCM report; Source: Statistics Canada Labour Force Survey. Our table shows only both sexes though males/females data is available from FCM report.

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices** [2]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Work hours loss due to illness or disability (as a % of total actual hours worked), 1997[14]									
15-39 years		1.5	1.6	1.3	0.9	2.3	2.1	1.9	1.7
40+ years		2.4	1.8	2.5	1.8	3.0	2.3	2.4	2.4
Income Indicators									
Average household income (rank amongst 10 Canadian CMAs, 1981 and 1996) [15]		#7 (1996) #2 (1981)							
Growth in average household income (rank amongst 10 Canadian CMAs, 1996)[16]		#10							
Minimum wage		$5.00	$5.00	$6.85	$6.85	$5.40	$5.60	$7.15	
Median hourly wages, by age and both sexes, 1997[17]									
15-24 years		7.50	8.00	7.90	8.00	7.00	7.00	9.00	7.46
15-39 years		11.54	12.00	13.35	13.00	12.00	12.00	13.80	11.65
40+ years		15.38	16.92	21.54	17.00	15.00	16.08	17.23	16.00
Employment income as a percentage of total income, 1996[18]		71.9	78.4	71.1	75.7	70.5	72.9	71.1	71.6
1992		73.7	77.1	74.8	75.9	70.9	73.8	69.7	71.9

[14] Table 6.5 in FCM report; source: Labour Force Survey
[15] Source: Statistics Canada, prepared by Nichols Applied Management
[16] ibid.
[17] Table 3.4 FCM report; Source: Statistics Canada Labour Force Survey, data for males and females is also available in FCM report
[18] Table 3.6 in FCM report; Source: Statistics Canada Small Area and Administrative Data

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**[2]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Percent of families receiving employment insurance and social assistance, by family type, 1996[19]									
Husband-Wife Families									
EI		21.0	18.7	16.4	18.5	20.9	16.7	18.6	24.2
Social Assistance		9.2	6.1	9.3	7.7	5.7	6.7	8.3	7.8
Lone- Parent Families									
EI		15.2	15.1	9.8	11.7	14.5	12.1	13.7	16.5
Social Assistance		37.2	26.6	45.2	38.4	35.5	39.3	38.7	39.9
Non-Family Persons									
EI		10.3	10.1	6.8	7.0	7.9	6.6	8.8	10.7
Social Assistance		22.8	16.1	17.4	14.9	12.2	15.2	17.1	15.7
Government Transfer income as percent of total community income (1996)[20]									
Total Government Transfers		12.0%	7.8%	10.5%	10.7%	13.9%	12.0%	11.1%	13.9%
Employment Insurance		1.7	1.3	1.1	1.3	1.4	1.1	1.4	2.2
Old Age Security/Supplements		3.1	2.0	2.4	2.5	4.1	3.5	3.1	3.6
Canada Pension Plan		3.4	2.2	3.0	2.9	4.2	3.6	2.6	3.6
Child Tax Benefits		1.0	0.7	0.6	0.8	0.9	0.9	0.6	0.9
GST Tax Credit		0.6	0.4	0.4	0.5	0.6	0.5	0.6	0.5
Worker's Compensation		0.5	0.3	0.3	0.6	0.5	0.5	0.6	0.7
Social Assistance		1.8	0.8	2.3	1.8	1.8	1.8	0.3	2.0
Provincial Refundable Tax Credits/Family Allowance		0.0	0.0	0.3	0.4	0.5	0.0	2.0	0.4

[19] Table 3.3a in FCM report; Source: Statistics Canada Small Area and Administrative Data. Notes: Statistics Canada defines "non-family persons" as persons in a household without a spouse, children or parents.

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Percentage change in family income (1992-1996) by percentile family incomes (1992 dollars)[21]									
10% ile		-24.4	-18.2	-28.5	-31.1	-16.2	-11.4	-22.8	-18.2
20% ile		-11.2	-8.7	-22.0	-20.1	-8.3	-7.1	-12.4	-9.3
30% ile		-11.3	-6.9	-14.9	-14.3	-6.5	-5.7	-3.5	-7.8
40% ile		-10.2	-5.1	-10.9	-11.4	-5.9	-4.0	-10.6	-5.8
50% ile		- 8.6	-4.1	-8.9	- 9.0	-4.6	-3.4	-8.7	-4.5
60% ile		- 7.7	-2.9	-7.4	- 6.6	-4.0	-2.0	-6.5	-3.0
70% ile		- 6.7	-1.5	-5.9	- 4.9	-3.4	-1.5	-4.7	-2.1
80% ile		- 5.8	+ 0.3	-4.3	- 3.4	-2.3	-0.6	-2.8	-1.2
90% ile		- 4.7	+2.7	-2.1	- 1.4	-0.9	+0.7	-1.9	0.0
Disparity in annual family income (% of families with income in the following quintiles), 1996									
$0 –19,999	16%								
$20,000 – 39,999	27%								
$40,000 – 59,999	24%								
$60,000 – 69,000	10%								
$70,000 +	24%								
Poverty Indicators									
Poverty: incidence of low income, Edmonton CMA (Percentage of families that are low income)[22]									
1996		17.4	15.7	14.4	18.6	18.4	14.1	18.7	16.2
1991		16.0	14.0	12.0	12.0	17.0	13.0	14.0	13.0

[20] See Table 2.5c, FCM Quality of Life Reporting System report, this table also shows the % of citizens reporting transfer income (these figures are excluded from this table in the interest of space); Source: Statistics Canada Small Area Administrative Data (Special Tabulations). Calculations by the Advocate Institute.
[21] See Table 2.3b, FCM Quality of Life Reporting System report.
[22] Table 5.2b FCM report; source: 1996 Census and a Statistical Profile of Urban Poverty (Ottawa: CCSD, 1996).

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Percentage of families (2 persons or more) living below the low-income cutoff (LICO)[23]									
1996	14.2%								
1995	18.3%								
Foodbank demand – (number of people using Edmonton's foodbank per 100,000 population)**									
1998	29,604								
1993	19, 622								
Financial Health Indicators									
Business bankruptcies per 1,000 establishments[24]									
1996		23	16	20	8	10	17	4	15
1991		17	16	28	8	18	24	5	16
Consumer bankruptcies per 1000 population[25]									
1996		5.1	4.2	3.2	2.8	3.5	2.7	2.2	2.7
1991		2.4	3.2	2.7	2.6	3.4	2.8	1.5	2.2

[23] In 1996 there were 35,358 economic families of two persons or more living below LICO and 47,580 families in 1995.
[24] Table 5.5a FCM report; source: Office of the Superintendent of Bankruptcy, Industry Canada
[25] Table 5.5b FCM report, source: Office of the Superintendent of Bankruptcy, Industry Canada

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices••[2]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Municipal expenditure on debt (debt servicing as % of municipal expenditures) 1997 1996	 4.78% 4.43%								
Physical Urban Infrastructure 1996 condition rating of Edmonton infrastructure (good, fair, poor)[26] • Muttart • Golf courses • Heritage facilities • Sports/fitness • Fort Edmonton/Zoo • Park amenities • Buildings/structures • Arenas • Sportsfields • Playgrounds	% Good 60% 25 59 90 86 60 85 63 70 60 55								
COMMUNITY									
Population Indicators									
Population (1996)[27]		616,305	768,085	721,140	2,385,420	618,475	180,400	514,010	28,846,760

[26] The source for this indicator is provided by City of Edmonton, Community Services; the indicator (5.5 in Edmonton LIFE) also includes annual capital budgets by program

[27] Source: 1996 Census (Special Tabulations)

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Population age distribution (% of population									
Under 15 years		20.6	21.2	19.9	17.8	20.0	21.9	13.9	20.5
15-24 years		14.1	13.5	13.2	12.4	13.7	14.9	13.3	13.4
25-44 years		34.9	37.2	34.3	35.0	32.3	32.2	38.6	32.4
45-64 years		19.5	19.3	21.6	21.3	20.4	19.0	21.3	21.5
65-74 years		6.5	5.4	6.4	8.0	7.4	6.5	7.0	7.1
75 years +		4.4	3.5	4.7	5.4	6.3	5.5	5.9	5.1
Population growth, '91-'96 (%)		-0.1	8.1	6.3	4.8	0.5	0.7	8.9	5.7
Rank amongst 10 Canadian CMAs (1998)[28]		# 6							
Visible minorities (%)		18.1	16.5	10.5	37.0	11.9	5.7	44.8	11.2
Foreign born (%)		22.5	21.7	15.0	47.6	17.7	8.3	44.9	17.4
Migrants (% of population) in past 5 years		14.5	17.1	21.3	19.2	9.9	14.0	27.0	18.7
Percentage of lone parent families, 1996[29]		17.2	13.7	15.6	18.9	16.6	17.3	16.4	14.5
Child welfare caseloads per 100,000 **									
1998	673								
1993	433								

[28] Source: Statistics Canada, compiled by Nichols Applied Management
[29] Table 5.1 FCM report; source, 1996 Census

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**2	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Leisure activities (participation in social and recreational activities based on visitation to facilities, events and festivals), 1997/98 season									
• Arena	2,123,819								
• City Arts Centre	26,194								
• Kinsmen Sports Centre	772,849								
• Valley Zoo	195,418								
• Commonwealth Stadium	618,343								
• Fort Edmonton Park	195,731								
• Golf Courses	181,376								
• Leisure Centres	1,963,268								
• Muttart Conservatory	127,838								
• John Janzen Nature Centre	67,035								
• Edmonton Symphony Orchestra	147,414								
• Edmonton Opera	22,000								
• Number of Arts Events and Festivals	59								
• Number of Festival Attendees	2,350,000								

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**[2]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Crime rates per 100,000 population[30]									
Young offenders charged									
1996		568	681	226	278	649	1,219	234	473
1991		804	1,244	395	496	779	1,215	481	611
1986		259	392	310	522	1,049	752	390	522
Crimes of violence									
1996		1,038	777	1,105	1,027	1,183	1,293	1,602	973
1991		1,522	1,106	1,545	1,399	978	981	1,571	1,056
1986		1,396	526	875	951	904	896	1,765	782
Property crimes									
1996		6,102	5,596	7,058	4,969	6,520	10,444	16,154	5,193
1991		10,634	8,256	9,139	6,642	7,483	10,177	13,061	6,143
1986		9,322	5,665	8,581	5,507	9,316	10,139	12,314	5,528
Reports of domestic violence **									
1998	286								
1996	272								
1993	285								
Fear index: feeling of personal safety and security (how safe people feel; scores range from 0 (least fearful) to 19 (most fearful)									
1996	10.68								
1993	10.00								

[30] Table 7.1b in FCM report; source: Canadian Centre for Justice Information

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**[2]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Early intervention to assist children (ABC Head Start programs),1997/98, figures in bracket are % change over 1995/96)									
• Number of programs offered	16 (78%)								
• Number of schools offering the programs	10 (100%)								
• Number of volunteers	53 (18%)								
• Number of children and their families served	256 (78%)								
Sense of community and giving									
Charitable donations per tax file and per donor, 1997, CMA[31]									
• Average donation per donor		880	1,080	810	1,120	850	830	1,060	810
• Average donation per tax filer		230	300	260	290	260	250	260	210
Donations to United Way, total receipts and per capita									
1996 campaign receipts $		8,664,470	14,700,000	11,714,07	52,100,000	9,330,000	1,668,082	6,332,298	
1991 campaign receipts $		7,632,108	10,500,000	N/A	44,971,000	8,238,000	1,687,801	4,996,827	
1996 campaign receipts per capita		14.06	19.14	16.24	21.84	15.08	9.25	12.30	
1991 campaign receipts per capita		12.37	14.77	19.76	8.48	13.39	9.42	10.59	
Democracy Indicators									
Voter Turnout, Municipal Elections[32]									
1997/98		35.5	N/A/	31.9	50.8	53.6	23.4	N/A	
1994/96		50.3	23.4	39.0	36.3	53.5	39.4	N/A	
1991/94		51.6	34.2	41.0	43.0	58.4	N/A	N/A	

[31] Table 8.2a and b: Source: Statistics Canada Small Are and Administrative Data (special tabulations), at the CMA level

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**[32]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Daily newspaper circulation (% of households receiving daily newspapers, 1997		52.7	51.1	58.4	35.2	56.5	57.1	46.2	
Enrolment in post-secondary institutions (1997/98 only), full-time and part-time									
• University of Alberta	29,836								
• Grant MacEwan	7,235								
• NAIT	9,435								
• Alberta Vocational College	4,098								
• Concordia University Collage	1,266								
• King's University College	503								
Life-long learning (adult education)									
• % of population registered in adult education courses (1993)	72.2%								
• Library materials borrowed by adults									
o 1997	5,082,033								
o 1996	5,184,236								
PEOPLE									
Health and Wellness									
Life expectancy									
1998	79.54								
1993	79.33								
Infant mortality rate per 1,000 live births[33]									
1996		5.4	5.5	4.9	6.4	6.0	8.5	6.4	5.5
1991		8.3	5.0	6.2	7.1	5.6	7.4	6.9	6.4

[32] Table 8.1 in FCM report: source: Municipal governments (municipal information); Table 8.1 also includes Federal election voter turnout however these were left out of this chart.

[33] Table 6.1 FCM report; source: Statistics Canada Health Information Division

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**[2]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Low birth weight babies (Percentage of single births less than 2,500 grams to total single births)[34]									
1996	6.4[35]	5.6	5.2	4.7	5.7	4.9	4.1	4.8	4.6
1991		5.1	5.1	4.8	5.4	5.1	5.1	4.0	4.6
Teen births per 1,000 residents[36]									
1998	25.53**								
1996		27.3	20.7	13.3	18.0	33.6	39.2	9.3	22.1
1991		45.8	28.7	16.3	20.4	37.1	46.9	15.6	25.7
Suicide rates (per 100,000 population)[37]									
1996		19.1	12.5	10.6	8.0	10.3	13.5	8.2	13.0
1991		18.5	14.6	11.1	8.5	13.3	10.0	18.6	12.8
Premature mortality (before age 75) rates per 100,000 population[38]									
1996		662,7	629.4	587.2	598.2	660.4	663.8	651.3	671.3
1991		664.7	651.2	647.2	647.8	698.6	667.2	683.3	697.6
Potential years of life lost[39]									
• 1996	39,465								
• 1994	39,064								
Total lifetimes lost									
• 1996	526								
• 1994	517								

[34] Table 6.2 FCM report; source Statistics Canada Health Information Division
[35] Discrepancy between FCM and Edmonton LIFE statistics for 1996 cannot be resolved.
[36] table 5.3 FCM report; source: Statistics Canada Health Information Division.
[37] Table 5.4 FCM report, source: Statistics Canada Health Information Division
[38] Table 6.3a, b FCM report; source: Statistics Canada Health Information Division
[39] Number of potential years of life lost is calculated by subtracting the age at which a person dies from the age of 75; number of years of lifetimes lost is calculated by dividing the number of potential years of life lost by the age of 75.

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**[2]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Crude mortality rate due to injury and poisoning, per 100,000 population									
1996		51.3	38.5	32.1	31.7	36.9	40.8	34.0	45.5
1991		51.5	42.0	36.4	35.1	40.0	41.9	65.9	47.2
Incidence of STDs (City of Edmonton, per 100,000)**									
1997	405								
1993	442								
Hospital discharges, crude rate per 100,000 population[40]									
1996/97		17,021	17,720	9,886	10,471	6,946	22,150	18,955	8,771
1991/92		12,002	13,771	12,780	12,546	10,758	17,975	15,846	10,532
Access to medical services (# of persons on waiting lists for surgery, MRI and continuing care services). 1997(1996)	1997 (1996)								
• Joint replacement surgery (people)	517 (938)								
• MRI (magnetic resonance imaging) (people)	1,220 (1,188)								
• Cardiovascular surgery, urgent outpatient (days)	133 (169)								
• Continuing care (people)	481 (303)								

[40] Table 6.4 a, b FCM report; source: Canadian Institute for Health Information

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices***	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Number of hospital beds available in continuing care, acute care and psychiatric care, 1996/97:									
Continuing Care									
• Conventional beds	3,647								
• New option beds	174								
• Number of beds per 1,000 CHA residents	49.4								
Acute care	-								
• Glenrose Rehab. Hospital	157								
• Misericordia Hospital	-								
• Edmonton General Hospital	517								
• University of Alberta Hospital	573								
• Acute beds per 1,000 Edmontonians	1.99								
Psychiatric care beds	404								
Physical activity (% of adults who report regular physical activity), 1997									
• active	56%								
• active in past six months	40%								
• sedentary (no activity or in past six months)	26%								
Consumption and use of addictive substances:									
• dollar sales of alcohol per person, 1993	$553.41								
• rate of drug possession (policy chart rate per 1,000 adults), 1993	2.67								
• tobacco-related diseases (separation rate: discharge or death of a patient, per 1000 patients), 1994/95	0.74								
• alcohol-related separation charge, per 1000 patients, 1993/94	1.58								

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices**[2]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Crisis calls by type[1]									
• The Distress line									
o 1997	27,882								
o 1996	28,857								
• Suicide distress calls									
o 1997	6,423								
o 1996	6,854								
• Edmonton's Women's Shelter (WIN House)									
o 1997	3,625								
o 1996	3,913								
• The Sexual Assault Centre of Edmonton									
o 1997	2,382								
o 1996	2,100								
• The Gambling Line									
o Total	3,020								
o Edmonton only (24.9% of total)	748								
ENVIRONMENT									
Energy Use									
Energy consumption per residential customer, per year									
- natural gas ('96)	150 GJ								
- electricity '(97)Energy	6,348 kwh								
Transportation: Private vehicle usage ('94)									
- vehicle-kms. Traveled per person per day	15.69								
- litres of gas purchased per person (annual)	1,178								

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices*[42]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Waste Waste recycling (tonnage (kg) of collected recyclable goods per resident), 1997[41]		41	51	62	51	39	75	96	61 *average
Domestic waste per capita (tonnes per capita) 1997 1996 Recycling (tonnes per capita) 1997 1996	 0.309 0.382 0.038 0.040								
Water Quality River or Surface water quality (by use), 1996 Upstream Recreation Aquatic life Agriculture Downstream Recreation Aquatic life Agriculture	 Fair Good Good Not acceptable Fair Good								
Air Quality Index (% of days air quality rated good) 1997 1996 1995	 98.2% 99.2% 98.6%								

[41] Table 8.5 FCM report; source: Association of Municipal Recycling Coordinators

Comparative Capital Region Quality of Life Indicators	Edmonton LIFE – Local Indicators for Excellence & Edmonton Social Health Indices[42]	Federation of Canadian Municipalities (FCM) Indicators							
		Edmonton	Calgary	Ottawa-Carleton Regional Municipality	Toronto	Winnipeg	Regina	Vancouver	Canada
Urban green space[42] (area of parks per 1000 people) 1997 1996 1995	 6.69 6.80 6.81								

Sources:

Edmonton LIFE – Local Indicators for Excellence. Edmonton Social Planning Council. 1997

Quality of Life in Canadian Communities. The FCM Quality of Life Reporting System. May 1999.

Sustainable Calgary: State of Our City Report 1998. Sustainable Calgary

[42] Total green space in 1995 was estimated at 11,086 ha (4,300 ha owned by Edmonton Community Services and 6,786 ha privately owned).

7. Indicators Gap Analysis

While the above list of quantitative indicators is robust, there will likely be some gaps in what citizens and decision makers would find meaningful as measures of success and genuine progress. Based on input received from the expert working group sessions in June and compared to other North American indicator benchmarks analyzed, the following list of additional indicators might be considered for future development of the Capital Region's Comparative Quality of Life Indicators.

Economy:

- housing starts
- number of business establishments
- retail sales (total and per capita)
- tourism tax revenues
- cost of doing business
- venture capital
- workforce skills
- air traffic
- road conditions (transportation)
- average commuting time (transportation)
- Internet infrastructure (access and use) - # of households/businesses with Internet
- computer use
- office and industrials space (vacancy)
- residential development (housing starts and home reconstruction)
- urban expansion
- job growth: 2% (1998-99); 6% (199?-97). Conference Board of Canada
- unemployment: 5.2% (May 2000), lowest rate in 10 years
- income per capita: $27,630 (1999); Calgary $32,769
    - Growth: 3.1% (1998-99)
- poverty: Greater Edmonton 21%; City of Edmonton 26% (less than Quebec City, Vancouver, Winnipeg, fewer than other cities).
- industry clusters health (rank and growth)
    - Biomedicine and biotechnology
    - Engineering and technical services
    - Information and media services
    - Advanced manufacturing
    - Oil, gas and chemicals
    - Agriculture and forest products
    - Tourism and entertainment
    - Transportation and logistics

Societal:

- municipal government parks/recreation expenditures per capita
- best place to live rating (Places Rated Almanac)
- volunteerism (percent of adult population)
- high school graduation rate
- student internet connections
- student-teacher ratio
- alcohol and drug use (treatment)

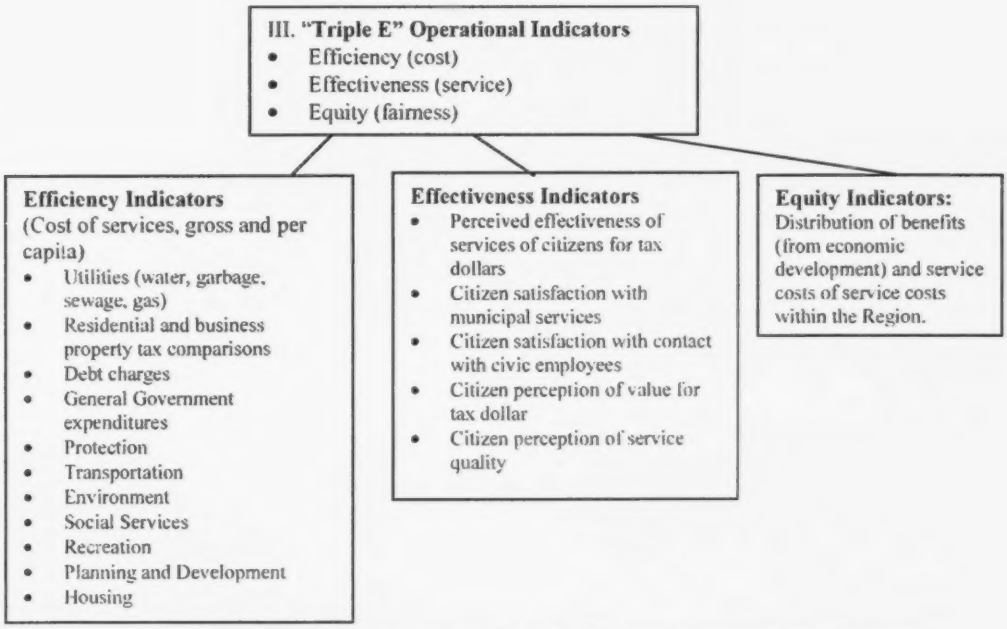
- status of seniors (self-rating of health)
- heart disease and cancer
- accidental deaths

Environment:

- renewable energy consumption
- food grown locally
- farmland converted to urban development
- ecosystem health
- water: 99.7% acceptability rating (EPCOR)
- recycling: 81% of households use Blue Bags
- pollution: 5 Edmonton companies were among the top 10 producers of pollution in 1998

III. Triple E: Efficiency, Effectiveness and Equity of Services Indicators

A Triple E (efficiency, effectiveness, equity) set of indicators are recommended to measure and compare operational (program, services) cost efficiency and service effectiveness at the Regional and possibly municipal level. This framework is illustrated in the diagram below. Cost efficiency indicators would account for the total, per capita costs, and costs per dollar unit output of municipal services, comparing the Capital Region with other Canadian municipalities. In addition the efficient use of limited resources (financial, human capital, materials) should be part of the efficiency indicator set. Each municipality may wish to track efficiency indicators using the criteria identified for comparison with other municipalities in the Capital Region, however, the focus should be on the cost competitiveness and service effectiveness of the Capital Region as a whole. Effectiveness measures would account for taxpayers' perceived value of services and program delivery for tax dollars as well as the effective use of limited resources. Equity measures would examine the distribution of the benefits from economic development within the Region and the distribution of related municipal service costs. Tracking the trends in service costs within the Region would help to identify any growing disparities between have and have-not municipalities


III. "Triple E" Operational Indicators
• Efficiency (cost)
• Effectiveness (service)
• Equity (fairness)
Efficiency Indicators
(Cost of services, gross and per capita)
• Utilities (water, garbage, sewage, gas)
• Residential and business property tax comparisons
• Debt charges
• General Government expenditures
• Protection
• Transportation
• Environment
• Social Services
• Recreation
• Planning and Development
• Housing
Effectiveness Indicators
• Perceived effectiveness of services of citizens for tax dollars
• Citizen satisfaction with municipal services
• Citizen satisfaction with contact with civic employees
• Citizen perception of value for tax dollar
• Citizen perception of service quality
Equity Indicators:
Distribution of benefits (from economic development) and service costs of service costs within the Region.

These Triple-E indicators would facilitate the strategic positioning of the Region in Canada building on the collective strengths of the 21 municipalities that make up the Capital Region. Understanding the current state of cost efficiency and service effectiveness, along with an understanding of equity (disparity) within the Region, will provide important information upon which decision makers can position the Region for comparative advantage in Canada.

There are several potential sources of data to begin construction of an initial data set. Sources of cost efficiency data could be drawn directly from budget documents and municipal government departments. Cost data would be compared or benchmarked for various service and program expenditure categories. Thus the cost efficiency of service delivery could be compared from the basis of each individual municipal government and in terms of the Region as an integrated system of service and programs. This comparison would reveal inequities in expenditures within the Region and would provide a basis for comparison citizen perceptions of value for tax dollars and quality of municipal services.

A study by University of Alberta political scientists Prof. James Lightbody in 1998 compared the expenditures of municipal governments in the Capital Region and comparing the City of Edmonton/Edmonton CMA/Edmonton ring cities with the City of Calgary/Calgary CMA. The

Major Public Expenditures of Core Cities and Regions (1996 per capita)

Expenditures	Edmonton	Edmonton CMA	Edmonton Ring Cities	Calgary	Calgary CMA
General Government	141.94	154.20	196.08	206.00	199.92
Protection	325.59	266.64	155.23	282.37	269.71
Transportation	509.82	458.93	230.20	454.13	444.78
Environment	341.00	289.72	188.12	248.22	239.82
Social Services	36.70	36.37	30.60	56.05	54.10
Recreation	170.95	164.70	199.21	161.95	159.08
Planning and Development	66.07	55.41	48.06	40.38	40.77
Housing	47.62	34.41	3.82	38.04	35.56
Total	**1,639.69**	**1,460.38**	**1,051.32**	**1,487.14**	**1,443.74**

Source: James Lightbody. 1998. "The Comparative Costs of Governing Alberta's Metropolitan Areas" Western Centre for Economic Research, Report # 48, January 1998. Table 5

Data is devised by Lightbody from Alberta Municipal Affairs, "Alberta Municipal Data", 1993.

Notes: "Protection" includes police, fire, and bylaw activities. "Environment" covers water, sewerage, waste management; "Transportation" includes roads, streets, transit and the equipment ppols; "Recreation" entails cultural and library activities.

Edmonton Municipal (CMA) Expenditures

Expenditures	Edmonton CMA	Cities	Towns	MD&C	Others
General Government	154.20	148.70	138.44	188.49	326.37
Protection	266.64	304.34	84.09	106.84	66.64
Transportation	458.93	475.36	148.06	471.66	238.62
Environment	289.72	321.93	217.42	134.53	264.79
Social Services	36.37	35.94	30.56	42.36	11.66
Recreation	164.70	174.48	155.42	112.82	148.01
Planning and Development	55.41	63.83	53	8.11	20.01
Housing	34.41	42.15	-	-	
Total	**1,460.38**	**1566.73**	**826.99**	**1064.81**	**1076.1**

Source: James Lightbody. 1998. "The Comparative Costs of Governing Alberta's Metropolitan Areas" Western Centre for Economic Research, Report # 48, January 1998. Table 4

Data is devised by Lightbody from Alberta Municipal Affairs, "Alberta Municipal Data", 1993.

results provide a useful benchmark

Lightbody's findings are important benchmarks for comparing the average costs of municipal expenditures and governance of the City of Edmonton, the Edmonton CMA and the Edmonton Ring Cities (adjacent cities to Edmonton). Of particular note are Lightbody's findings that reveal the differences in expenditures by the City of Edmonton and the average Regional (CMA) and Ring Cities expenditures; the City of Edmonton have higher costs of protection, transportation, environment, social services, planning and development, and housing (while having lower expenditures for general government and recreation. Lightbody's work should be considered an important benchmark for future expenditure comparisons for the Capital Region.

Nichols Applied Management conducted a review in January 2000 of financial (and economic) indicators as part of the Capital Region Governance Review process. Nichols analysis of costs of services differ somewhat from Lightbody's study and should be considered as alternative benchmarks for future efficiency indicator development. Nichols' work is particularly important since it compares costs of the Capital Region's service delivery with other Canadian municipalities. While comparing costs of municipal services within the Region may be useful to find the correct economies of scale, comparing the Capital Region's cost efficiency and service effectiveness with other Canadian municipalities is also important. One thing is clear; thorough analysis and caution should be used in comparing service costs within the Region and compared to other Canadian regions to ensure an "oranges-oranges" comparison.

The City of Edmonton's Business Plan for 2001 and 2003 contains a comparison of the property tax and utility charges across the Capital Region for a single house in 1999. This ranking of expenditures is also useful for reporting to citizens the comparative differences in property tax and utility charges across the Region.

Total Property Tax and Utilitiy Charges for a Single House in 1999 - Capital Region

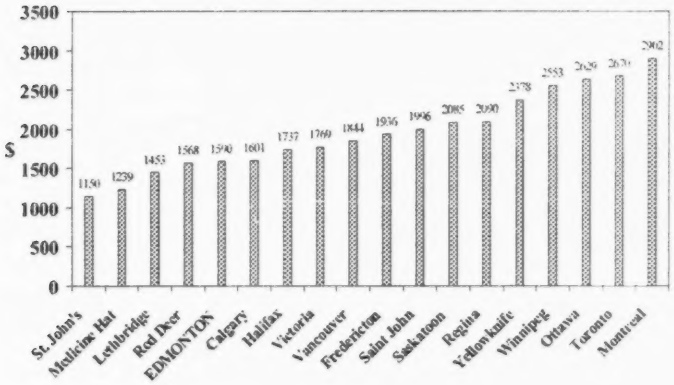
		% Higher than lowest rate
Leduc	3,132	119.3%
Spruce Grove	3,116	118.7%
St. Albert	3,114	118.6%
Morinville	3,109	118.4%
Strathcona County	3,105	118.2%
Stony Plain	3,052	116.2%
Devon	2,977	113.4%
Beaumont	2,938	111.9%
Edmonton	2,913	110.9%
Ft. Saskatchewan	2,629	100.1%
Leduc County	2,626	100.0%

Source: City of Edmonton Business Plan 2001 and 2003

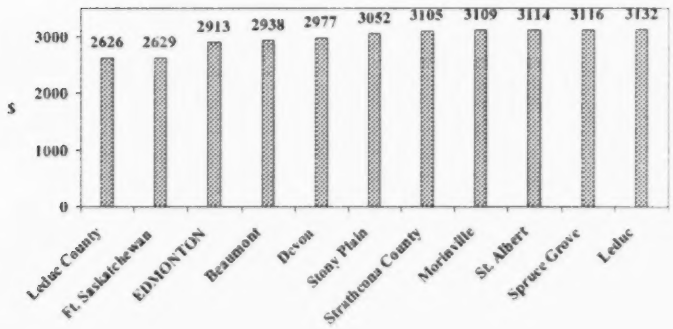
The following charts compare residential property taxes of Edmonton compared to other Canadian communities[43]

[43] "1999 Residential Property Tax and Utility Charges Survey", December 1999, prepared by the City of Edmonton Planning and Development Department

Total Property Tax for Single Family House in 1999 - Canadian Cities



Total Property Tax and Utility Charges for a Single Family House in 1999 - Edmonton Region



The City of Edmonton and the Strathcona County (Fort Saskatchewan) also conduct citizen satisfaction surveys regarding their satisfaction with quality of life, satisfaction with city services, satisfaction with civic employee relations, quality of city services, and value of tax dollars. The City of Edmonton's 2000 survey results show the following results. This approach to soliciting input on effectiveness and value of civic services is a useful benchmark for consideration for the entire Capital Region.

City of Edmonton's Citizen Satisfaction Survey, 2000

Performance Indicator	Source	2000 Results
Citizen satisfaction with City services	Citizen Satisfaction Survey	18% Very satisfied 61% Somewhat satisfied
Citizen satisfaction with contact with civic employees	Citizen Satisfaction Survey	49% Very satisfied 26% Somewhat satisfied
Citizen perception of value for tax dollar	Citizen Satisfaction Survey	10% Very good value 45% Good value
Citizen perception of service quality	Citizen Satisfaction Survey	6% Increased quality 75% Same quality
Residential property tax comparison	Property Tax and Utility Charges Survey	Fifth lowest among major Canadian cities Third lowest in Edmonton region

Appendices

Appendix 1:
A Survey of North American Indicator Frameworks

1. Federation of Canadian Municipalities: Quality of Life Reporting System

In 1997, the Federation of Canadian Municipalities (FCM) set out to answer these questions. Through the Quality of Life project, it developed a set of indicators to measure quality of life in Canada's cities. FCM's goal is to develop a global picture of living conditions within Canadian cities and identify trends and issues that might escape traditional measures of public policy outcomes. Together, these indicators amount to a report card on the quality of life in urban Canada called the Quality of Life (QOL) Reporting System.

The QOL Reporting System has evolved from a desire to bring a community-based perspective to the development of public policy and to monitor the consequences of changing demographics, shifting responsibilities and new fiscal arrangements. By providing a framework to monitor quality of life, the report card is of value to Canadian communities and all orders of government as a tool to:

- Identify and raise awareness of issues affecting quality of life in Canadian communities;
- Strengthen policies and resources aimed at improving quality of life; and
- Establish municipal governments as a strong and legitimate partner in public policy debate in Canada.

The QOL Reporting System also provides municipal governments with a valuable national forum for sharing experience and expertise. As a result, a strong network of municipal leaders and staff has been established.

The Report Card
Working with a team of officials from 16 participating municipal governments from across the country, FCM developed a set of eight indicators of community well-being. These are:

1. Community Affordability
2. Quality of Employment
3. Quality of Housing
4. Community Health
5. Community Safety
6. Community Stress
7. Community Participation
8. Population Resources

The report on the quality of life is being developed through a multi-phased approach. The first phase involved generating baseline comparative measures of quality of life. Later phases will involve complementing and verifying these through a series of qualitative measures. The technical team will also review and refine existing indicators and incorporate new measures in the economic and environmental domains.

The goal will be to publish annual snapshots of social and economic conditions in Canadian cities. Taken together, they will provide a compelling picture of quality of life in this country.
Technical Team — Participating Municipal Governments:

1. Halifax Regional Municipality
2. Regional Municipality of Waterloo
3. Regional Municipality of Ottawa-Carleton
4. Regional Municipality of York
5. Regional Municipality of Peel
6. Regional Municipality of Hamilton-Wentworth
7. City of Toronto
8. City of London
9. City of Windsor
10. City of Winnipeg
11. City of Saskatoon
12. City of Regina
13. City of Edmonton
14. City of Calgary
15. City of Burnaby
16. City of Vancouver

A New Framework, A New Perspective

The FCM Quality of Life project will serve as more than a passive report on life in urban Canada. Its goal is also to provide governments — municipal, provincial and federal — with a new framework for assessing public policies. In the past two decades, industrialized countries have experienced seemingly intractable social problems even in the midst of reported economic success. Low inflation, high GDP, positive trade balances, balanced-budgets — the hallmarks of successful economies — have not translated into the elimination of social inequalities.

The QOL Reporting System focuses on the real-life effects of public policies on people. This is in contrast to traditional program evaluators that have focused on impersonal standards of delivery of services or benefits, without much reference to their effect. The Reporting System also marks the first time that local data on social policy indicators has been collected on a nationally consistent basis. It provides a powerful tool for policy makers across the country.

Contact:

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2. Edmonton LIFE (Local Indicators for Excellence)

http://www.edmspc.com/summ.html

Edmonton LIFE: Local Indicators For Excellence, is a collaborative, on-going project, which measures the local quality of life. The purpose of the project is to provide an accessible and comprehensive annual report measuring health, environmental, economic and social indicators. The report will be reviewed and revised on an annual basis. This will promote standards of excellence and demonstrate the city's long-term commitment to enhancing quality of life.

Many different factors work together to establish and sustain quality of life in a city. Prior to measuring Edmonton's quality of life, it was necessary to list the variety of factors, which supported the city's well-being. The basic beliefs, elements and a vision statement were developed to capture this information. This information provided the groundwork for the following sections.

The Edmonton LIFE report is divided into four elements: Healthy Economy, Healthy Community, Healthy Environment and Healthy People. Previously, various groups in the community have focused on monitoring and evaluating specific sectors. Edmonton LIFE has brought these sectors together as part of an overall assessment of progress. A variety of indicators have been identified for each section to create a comprehensive, bench-marking report.

Each of the four sections begins with an overview and follows with a set of indicators. The overview provides background information for each section and describes the context for the indicators. The purpose of the indicators is to provide measures which gauge quality of life. Each indicator includes a brief description, rationale, directionality, qualifications and status.

Indicators for a Healthy Economy

Edmonton LIFE has developed 11 indicators for measuring economic health. It was determined that a healthy economy combines individual economic well-being and community economic health. External factors also affect this element through changes in technology, markets and international affairs. The extent to which Edmonton's economic well-being is affected by the national and international economy can be mitigated by monitoring and strengthening the local economy.

The healthy economy indicators are as follows:

- Net Business Creation
- Development Activity
- Municipal Expenditure on Debt
- Emerging Industry Research and Development Patents
- Labour Force Participation
- Adult Job-Related Education and Training
- Level of Education
- Households Below the Low Income Cut-Off Level (LICO)
- Air Traffic
- Corporate Revenue Spent on Training
- People With Income to Meet Basic Needs

Indicators for Healthy People

To assess the health of people in the community, Edmonton LIFE developed 11 indicators. One of the challenges in this section was deciding how to balance economic needs with humanistic needs. It was determined that healthy people are the result of all the various components of a community working well together (economy, environment and community). This resulted in the following list of indicators:

- Disparity in Family Annual Income
- Nutritious Food Basket Index
- Low Birth-Weight Infants
- Student Academic Achievement
- Life-Long Learning
- Physical Activity
- Food Bank Demand

- Premature Deaths
- Crisis Support Calls
- Consumption and Use of Addictive Substances
- Pre-School Children With Developmentally-Appropriate Behavior and Skills

Indicators for a Healthy Environment

To monitor the city's environmental health, Edmonton LIFE developed 11 indicators, which monitor change and development. Topics range from environmental education levels to measuring air and water quality. These indicators will enhance informed decision-making while managing the city's natural resources and environment. The list of environmental indicators includes:
- Private Vehicle Usage
- Energy Consumption Per Capita
- Air Quality
- River Water Quality
- Solid Waste Per Capita
- Urban Green Space
- Environmental In-Service Training for Teachers
- Environmental Content in the Classroom
- Community Design
- Total Air Emissions
- Public Environmental Awareness and Satisfaction

Indicators for a Healthy Community

In order to assess Edmonton's community health, Edmonton LIFE needed to determine which indicators enhance and foster community well-being. The process began by developing several concepts, which outline and describe healthy communities. Eleven measurable indicators were developed from the conceptual data ranging from infrastructure assessment to city crime rates. The complete list of indicators is as follows:
- Enrollment in Post-Secondary Institutions
- Charitable Donations Per Capita
- Voter Turnout
- Public Safety and Security
- Physical Urban Infrastructure
- Suicide Rates
- Access to Medical Services
- Number of Hospital Beds
- Volunteer Time
- Leisure Activities
- Early Intervention to Assist Children

In some sections, indicators did not include a status report due to the lack of measurable information. It was decided to retain such indicators due to their ongoing value to the quality of life. It is also believed that these indicators will become measurable in the future. Non-measurable indicators are listed at the end of each section. This project sets an example for communities across the country by embracing excellence and monitoring healthy growth and change.

Contact:
http://www.edmspc.com/summ.html

The Edmonton Social Planning Council
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3. The Edmonton Social Health Index (ESHI)

The Edmonton Social Health Index was developed by the Edmonton Social Planning Council to track trends in the social health of Edmonton. The ESHI is composed of 15 indicators of social, health, and economic and other indicators:

15. Life expectancy
16. Premature deaths
17. Low birth-weight babies
18. Teen birth rate
19. Suicide rates
20. Crisis support calls
21. Incidence of STDs
22. Child welfare case loads
23. Foodbank use
24. Percent of economic families in poverty (living below LICO – low income cutoff)
25. Single parent households
26. Personal bankruptcies
27. Property crime rates
28. Reports of domestic violence

These indicators provide a time series from 1993 (benchmark year) to 1998. Each indicator's raw data set is then converted to a normalized index using 1993 as the benchmark year converted to 100 basis points. All indicators can then be added up assuming equal weighting to yield a composite index of all 15 individual indicators.

4. Sustainable Calgary State of Our City Project[ii]

http://www.agt.net/public/sustcalg/

Sustainable Calgary was formed in 1996 by 10 volunteers inspired by Sustainable Seattle and the community sustainability work of a local non-profit society called the Arusha Centre. The volunteers had experience in international, social and community development work and were concerned with the predominance of the narrow set of economic indicators used in city decision making. Over time, occasional funding and donations have come from a number of local agencies, from Environment Canada, Health Canada and CUSO. The goal of the Sustainable Calgary State of Our City is to develop and institutionalize a set of sustainability indicators and monitor them to track Calgary's long term health and vitality.

After a first set of 2 or 3 forums where the Seattle project was described, eight people volunteered to be involved in a Sustainable Calgary project. Beginning in March 1996, these volunteers dedicated a year to researching sustainability indicators and their potential to promote and encourage community level actions and local sustainable development. The development process was intended as a citizen initiative with broad participation. (Initially the volunteers developed a database of participant characteristics to monitor the diversity of people involved but the database was not maintained.)

In March 1997, an introductory workshop was held and attended by 85 citizens. Participants were invited to sign up for one of five think tank groups that were to identify over three months the appropriate indicators for each of five theme areas: economy, community, natural environment, resource use and health and education. Each think tank of between eight and 15 people met three times to decide on what indicators should represent their area, using a set of four predetermined assessment criteria: ease of data availability; balance of indicator themes; ease of report writing; availability of a steward for the indicator – someone to gather data, monitor and research the indicator. In mid 1997, at a plenary workshop, each group presented their top 10 indicators. All participants then voted on the overall top ten indicators. The project core group compiled the results of the voting and decided which indicators would be included in a first addition of the State of the City Report. Twenty-four indicators were selected across the five themes. The think tank participants were invited back for a project update and volunteer stewards were recruited for each indicator, to conduct some basic research on the indicator and identify key topic experts. Stewards were later oriented to their tasks. Indicator research was finalized by early 1998 and the first Sustainable Calgary State of Our City Report was created (1998). In total, more than 300 citizens volunteered over 4000 hours over two years to the project.

The Sustainable Calgary State of Our City Report (1998) is intended: to create a focal point for discussion of sustainability issues and to raise to a higher level the public debate; as an educational tool; to monitor issues, actions and policies; to provide a basis for action and influence policy, planning and community processes; and to demonstrate links among economic, social and ecological sectors (indicators). The report challenges individuals to consider options for how they can contribute to greater local sustainability.

Indicator theme areas are:
economy (5 indicators)
health and education (5)
community (5)
natural environment (6)
resource use (3)

Regarding lessons learned, Sustainable Calgary has found that continued high levels of diverse participation, particularly with marginalized people who typically do not self-select for citizen involvement projects, require a proactive approach, aggressive recruitment and making it easy for people and organizations to get involved. As well, since one of Sustainable Calgary's objectives is to institutionalize the indicator project, the integration of elected officials and key decision-making bodies into the project processes is imperative. A key finding was that as citizen participation increased, business and government interest increased.

The first report was presented to the policy committee of the City which subsequently put forward three resolutions that the City accepted: to invite Sustainable Calgary to be involved in similar projects that the City is aware of; to support decisions that bring major decision making parties together to discuss the report; and to direct the report to all City departments and ask for their response.

Sustainable Calgary's current challenge is how to integrate a citizen's initiative into government processes. A proposal is the creation of an arms length independent organization or agency that can respect and maintain the integrity of the project as it has evolved till now, for example, through a citizen's sustainable development commission.
A lesson learned regarding indicators themselves was the creation of an "indicator in progress" – a good indicator for which a technically sound measure does not exist, for example, food grown

locally. The response was to set up a task force for such an indicator to respect citizen's interest in it and explore how to begin to measure it.

After the launch of the State of Our City Report, Sustainable Calgary received funding to do a series of sustainability indicator workshops and public forums to expand the community representation to the project for example, to involve youth, business, social studies teachers, ethno-cultural communities in the city, street involved people, the disabled and the low income community. The workshops and forums are being held at convenient times where people work or gather. They are part of "2000 Voices", the citizen involvement plan for the development of the second report. The process goal is to engage 2000 citizens; so far workshops and presentations have drawn about 900 people. Another objective was to make a strong effort to get a better base of indicators; the goal is to add between 6 and 12 new indicators to the report card.

The project Sustainable Calgary was invited to participate in City of Calgary initiatives concerning indicators and considerations for the future quality of life in the city. The State of Our City Report is being used in the curriculum of several courses at the University of Calgary. Sustainable Calgary is working with a local agency on a project to explore community-based outcome indicators for new immigrants, intending to address newcomers directly and also professionals in immigrant service agencies. Sustainable Calgary also received funding to coordinate two other initiatives – the Green Map and the Ecological Footprint.

Once the report card project is institutionalized, Sustainable Calgary plans to focus its efforts on facilitating the changes needed to mobilize community people to positively influence various indicators through pressure, presence and action. The objectives are to advocate for support of the project and to promote action.

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5. Buffalo-Niagara Region: State of the Region Performance Indicators 1999

http://regional-institute.buffalo.edu/sotr/default.html

Released in November 1999, *State of the Region* is a major new report developed by the UB Institute for Local Governance and Regional Growth in collaboration with eleven task force chairs and more than 200 community leaders. For eleven areas key to Buffalo-Niagara's quality of life and competitiveness, *State of the Region* addresses questions like

- what performance trends define the Buffalo-Niagara region at the turn of the 21st century?
- how is the region doing in areas crucial to quality of life and competitiveness?

- what regional goals are appropriate in the next decade?
- what steps can the region take to build on strengths and achieve performance goals?
- what groups and organizations might take the lead to improve performance in specific areas?

Purpose
The purpose of the State of the Region project is to measure, monitor, and propose goals and action steps for performance in the binational Buffalo-Niagara Region. The project focuses not on how the region stands in relation to other metropolitan areas, but rather on how well the region is doing by its *own* account relative to its regional goals, needs, and priorities.

Premise
The premise of the report is the axiom that "you can't manage what you can't measure." In the absence of good data, a region relies on stories and anecdotal information on what's working, what's not, and what it should do. While stories can be valuable, relying on them solely may lead to mistakes or missed opportunities. Assessing stories against objective data provides a foundation for regional understanding and action.

Process
The UB Institute for Local Governance and Regional Growth initiated the State of the Region project in summer 1998 by identifying eleven areas central to regional competitiveness and quality of life. To assist in selecting eight to ten telling, useful, and routinely measured indicators of performance in these areas, the Institute relied on eleven task forces, led by eleven chairpersons. These task forces, representing expertise and a range of perspectives from over 200 members of the regional community, met through spring 1999, aided by Institute staff and a State of the Region project team that tracked down data and analyzed findings.

The following indicators were identified for the Buffalo-Niagara Region:

1. Economy
1.1 Job growth
1.2 Weekly earnings
1.3 Employment concentration
1.4 Cost of doing business
1.5 Cost of living
1.6 Foreign exports
1.7 Air fares
1.8 Patents

2. Environment
2.1 Air quality
2.2 Chemical releases
2.3 Stream and lake quality
2.4 Hazardous waste sites
2.5 Brownfields
2.6 Ecosystem health
2.7 Endangered lands
2.8 Vehicle miles traveled
2.9 Recycling

3. Government
3.1 Local government employment
3.2 Local government revenue sources

3.3 School district revenue sources
3.4 Local government debt
3.5 Cost containment
3.6 Bond ratings
3.7 Award-winning financial reporting
3.8 Property revaluation
3.9 Regional cooperation
3.10 Voter enrollment and turnout

4. Education
4.1 Foundation for school
4.2 Student-teacher diversity
4.3 Student performance – elementary grades
4.4 Student performance – middle grades
4.5 Student performance – high school
4.6 Student internet connections
4.7 Dropout rates
4.8 Educational attainment
4.9 Colleges and universities

5. Technology and Information
5.1 Internet infrastructure
5.2 Computer use
5.3 Library circulation
5.4 Regional internet presence
5.5 Technology-based businesses
5.6 Technology workforce
5.7 Venture capital

6. Health
6.1 Birth weight
6.2 Childhood immunizations
6.3 Asthma
6.4 Teen pregnancy
6.5 Cardiovascular health
6.6 Exercise levels
6.7 Smoking prevalence
6.8 Mental health
6.9 Insurance coverage

7. Public Safety
7.1 Violent crime
7.2 Property crime
7.3 Youth crime
7.4 Domestic violence
7.5 Drug offenses
7.6 Incarceration
7.7 Fires
7.8 Emergency response
7.9 Motor vehicle accidents

8. Human Services

8.1 Feeding the hungry
8.2 Providing shelter
8.3 Quality child care
8.4 Elder care
8.5 Child and adult abuse
8.6 Alcohol and drug treatment
8.7 At-Risk Youth
8.8 Serving the Developmentally Disabled

9. Equity
9.1 Distribution of poverty
9.2 Equity in homeownership
9.3 Housing discrimination
9.4 Occupational equity
9.5 Women in leadership
9.6 Interfaith relationships
9.7 Disability and work
9.8 Intergenerational equity
9.9 Sexual orientation

10. Planning and Land Use
10.1 Urban expansion
10.2 Farms and farmland
10.3 Office and industrial space
10.4 Residential development
10.5 Road conditions
10.6 Public transit ridership
10.7 Master planning and zoning
10.8 Alternative planning tools
10.9 County and regional planning
10.10 Planning coordination

11. Regional Assets
11.1 Audiences for arts and culture
11.2 Audiences for sports and recreation
11.3 Affordability of family outings
11.4 Support for the arts
11.5 Parks and open space
11.6 Preserving history
11.7 Hosting visitors
11.8 Sports conventions
11.9 Regional reputation

6. Jacksonville, Florida: *Quality of Life in Jacksonville: Indicators for Progress*[iii]

http://www.jcci.org/qol/introqol.htm

A strong motivation for community improvement is an explicitly stated goal of the City of Jacksonville, the Jacksonville Chamber of Commerce and the Jacksonville Community Council

Inc. (JCCI). The QOL project, funded by the Chamber of Commerce, represents an effort to monitor Duval County's progress on an annual basis.

During the summer of 1985, over 100 volunteers met in subcommittees under the leadership of a steering committee appointed by the JCCI president in consultation with the Chamber of Commerce. The volunteers developed a quality of life model with nine elements. They also selected specific indicators for each element, guided by criteria assigned by the steering committee.

Seventy-two indicators are organized around five focus areas used by the United Way to identify its major areas for funds allocation:
creating a brighter future for our children and youth
building stronger families and neighborhoods
creating independence for elderly and disabled
responding to personal crisis and disaster
promoting wellness and protecting our health

In 1991, new task forces involving over 140 volunteers reviewed the indicators. As a result, several were eliminated due to data problems, others were revised for clarity and several new indicators were added. With the findings provided by JCCI staff on standards or goals for the various indicators, the task forces established a target for each indicator for the year 2000. The task forces also identified a "most important" indicator for each element. From these, a top-priority indicator became the focus for community attention and action during the 1990s. Finally, the task forces ranked the elements.

Beginning in 1986, data for all indicators are reported annually. Annual updates display data for 14 years except for the new indicators added in 1991.

Regarding lessons learned, the 1998 Quality of Life Committee of volunteers recognized the need for several improvements, to be addressed through a new Indicators Steering Committee:
some indicators need to be reported at the regional level e.g. core versus suburban areas
some indicators need to be reported at the neighborhood level
linkages among indicators need to be identified and recognized
targets need ongoing attention - some may be too idealistic, some may not be enough so; targets should be set for only five years; methods used to select targets must be documented and as objective as possible.

JCCI publishes two QOL documents annually: an executive summary and a reference document. The documents are widely used by public and private decision makers in Jacksonville to inform strategic planning and to guide policy making. Through media exposure and JCCI presentations, the documents have become a major source of public knowledge and awareness about aspects of community life.

Contacts: http://www.jcci.org/qol/introqol.htm

7. Orlando, Florida: Compass Index of Sustainability

Alan Atkinson (a sustainability indicators consultant with Atkinson & Associates) is currently assisting Orlando, Florida in developing a "Compass Index of Sustainability" which provides a framework for aggregating and displaying an array of sustainability indicators. It uses the indicators developed by a community, company, state, nation or other entity and clusters them to

take as their metaphor the points of the compass: N or Nature, E for Economy, S for Society and W for Well-Being. These are the clustering points for measures of economic, environmental, social and individual human well-being. A series of indicators are used whereby the raw data is converted to an index value. The indexing method usually relates to comparing the actual data to a sustainability target or goal. Indexing allows for assessing trends (progress or regress) towards sustainability objectives as well as for the aggregation of indicators along the four compass points and as a composite sustainability index using all four compass point indicators. The strength of Compass Index is that it provides the benefits of transparency of the data set as well as the strength of simple visual presentation of the direction of progress towards sustainability outcomes. Again, no weighting of individual indicators is applied.

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8. Pierce County, Washington Quality of Life Benchmarks (1998)

http://www.co.pierce.wa.us/services/family/benchmrk/qol.htm

The purpose of the Pierce County Quality of Life Benchmark Project is to gather and publish information about the well-being of our community as a whole. Pierce County's benchmarking effort uses information gathered from a variety of sources to track changes in different aspects of residents' lives. The benchmarking process is intended to be used to make very generalized statements about whether life in the County is getting better, worse, or staying the same. By starting with objective measurements of past trends and current conditions, it is possible to shape future public policy in an informed and holistic way.

The Benchmark project tracks changes in 80 indicators. Indicators are measured such that higher values indicate an improvement in "quality of life."

The Department of Community Services of Pierce County, Washington have developed a Quality of Life Benchmarks report which is intended to provide a comprehensive snap-shot of the well-being of the community. The Benchmark Project combines over 200 discrete pieces of data into 80 indicators divided into nine goal categories:

- Affordable housing
- Clean environment
- Cost Effective Infrastructure
- Cultural and Recreational Opportunities
- Educational Excellence
- Effective Regional Transportation
- Health and Safety for Persons and Property
- Healthy Economy
- Proper Distribution of Land

The Benchmark Project tracks changes in each of the eighty indicators, by goal category, or by the aggregated total of all 80 indicators relative to 1990, which is used as the benchmark year. Raw data is converted first to a raw data value indicator (e.g. total wage and salary jobs per employed resident), which generally involves the ratio of one data set (e.g. GDP) over another (e.g. population). The raw data value indicator is then converted to a normalized indicator value through a calculation of the ratio of any raw value indicator data point in year 'x' relative to the benchmark year 1990 raw value indicator data. For all indicators, the year 1990 is set at a 100

basis points against which future declines or improvements can be gauged. The benchmark year does not represent a target but rather a comparative value against which subsequent change can be compared.

All indicators are measured such that higher values (greater than 100) indicate an improvement in measured quality of life indicators, while lower values (less than 100) indicate a decline in quality of life indicators. The strength of such indexing is that it allows for aggregation of many indicators by any number of goals, themes or as a composite whole. It allows for assessing change over time relative to some starting point without setting a performance target. The indicators per each goal are then averaged, without weighting, to yield a composite index. The composite indices for each of the nine goals can also be aggregated to derive a composite Quality of Life Index for the county.

1. **Housing Affordability**
   - 1.1 Median family income as percent of median single family house price
   - 1.2 Median family income as percent of annual single family house mortgage payment
   - 1.3 Median family income as a percent of average property tax on single family house sold
   - 1.4 Percent of households able to afford buying median single family house
   - 1.5 Number subsidized housing units per person
   - 1.6 Median family income as percent of average rent on 2-bedroom apartment
   - 1.7 Average annual multi-family housing vacancy rate

2. **Clean Environment**
   - 2.1 Percent days per year rated as having good air
   - 2.2 Households per residential MWH consumed
   - 2.3 Total employment per industrial and commercial MWH consumed
   - 2.4 Households per pound of solid waste disposed (not recycled)
   - 2.5 Mfg. Workers per pound of toxic chemicals released into air
   - 2.6 Mfg. Workers per pound of toxic chemicals released into water

3. **Cost Effective Infrastructure**
   - 3.1 Gallons of waste water processed as percent of permitted capacity
   - 3.2 Inverse of real household monthly service charge for waste water treatment
   - 3.3 Inverse of real household connect charge for waste water treatment
   - 3.4 Persons per pound of solid waste generated per day
   - 3.5 Percentage of solid waste recycled
   - 3.6 Average monthly residential solid waste charge

4. **Cultural and Recreational Opportunities**
   - 4.1 Public library items circulated per person
   - 4.2 Community centers per person
   - 4.3 Attendance at Mt. Rainier per mile of trail
   - 4.4 Registered attendance at major Tacoma MPD facilities
   - 4.5 Average number cultural and recreational events scheduled per week
   - 4.6 Attendance at Puyallup Fair per person in county
   - 4.7 Attendance at Tacoma Art Museum per person in city
   - 4.8 Acres of park lands per person

5. **Educational Excellence**
   - 5.1 Percent of high school seniors graduating
   - 5.2 Percent of districts with graduation rates above state average
   - 5.3 Inverse high school drop-out rate

5.4 Percent of school districts with lower dropout rates than state average
5.5 Percent of districts with 4th grade mean test scores equal/above state average
5.6 Percent of districts with 11th grade mean test scores equal/above state average
5.7 Degrees awarded from county universities and community colleges
5.8 Persons attending college or technical school as percent of person age 20 to 24 years

6. Effective Regional Transportation

6.1 Number of persons per passenger car
6.2 Miles of road in Tacoma per vehicle miles traveled
6.3 Miles of state road in rural county per vehicle mile traveled
6.4 Number of transit-rider trips per capita
6.5 Inflation-adjusted transit revenues per transit-rider trip
6.6 Containers transported through Port of Tacoma (TEU's)
6.7 Inverse inflation-adjusted cost per transit rider trip
6.8 Average transit-trips per hour per bus

7. Health and Safety for Persons and Property

7.1 Persons per violent crime index
7.2 Persons per non-violent crime index
7.3 Percent crimes cleared
7.4 Persons per traffic accident death
7.5 Persons per traffic accident injury
7.6 Person per fire call
7.7 Inverse of average fire call response time
7.8 Persons per emergency call
7.9 Inverse of average rescue call response time
7.10 Persons per accidental (non-traffic) death
7.11 Inverse infant deaths per 1,000 infants (under 1 year old)
7.12 Inverse county infant death rate relative to state
7.13 Inverse cancer deaths per 1,000 persons age 45-74
7.14 Inverse county cancer death rate relative to state
7.15 Inverse heart disease deaths per 1,000 persons age 45-74
7.16 Inverse county heart disease death rate relative to state
7.17 Inverse accident deaths per 1,000 persons under 45 years of age
7.18 Inverse county accident death rate relative to state

8. Healthy Economy

8.1 Number of business establishments
8.2 Inflation adjusted assessed value of real estate per person
8.3 Retail sales as a percent of personal income
8.4 Total wage and salary jobs per employed resident
8.5 Number of basic industry jobs
8.6 Percent of wage and salary jobs not in 5 most concentrated industries
8.7 Total wage and salary jobs
8.8 Average earnings per job
8.9 Inverse percent of average earnings needed to support basic needs
8.10 Manufacturing wage and salary earning as a percent of total income
8.11 Manufacturing wage and salary jobs as a percent of total jobs
8.12 Number of wage and salary jobs per household
8.13 Per capita income as percent of state average
8.14 Professional, technical and managerial occupations as a percent of total
8.15 Value of business personal property per worker

8.16 Value of industrial and commercial property

9. Proper Distribution of Land

9.1 New housing units relative to new households
9.2 Share of new housing units going into urban parts of county
9.3 New multi-family units as percent of total new residential units

Contacts: *http://www.co.pierce.wa.us/services/family/benchmrk/qol.htm*

9. *Measures of Growth 2000*: Maine Economic Growth Council

http://www.mdf.org/mege/growth00/

The State of Maine has developed a set of 56 indicators of quality of life. Produced by the Maine Economic Growth Council the performance indicators reports (presented on their website) progress along the lines of 56 indicators towards explicit targets.

The vision of the initiative is as follows

"Our vision is a high quality of life for Maine citizens.

Central to this vision is a sustainable economy that offers an opportunity for everyone to have rewarding employment and for businesses to prosper, now and in the future.

The people of Maine bring this vision into reality by working together and building on our tradition of hard work, dedication, and Yankee ingenuity."

The **vision** statement is the focus of all the work. Achieving the vision is the reason for economic growth and development. In order to give the vision meaning, **goals** have been developed for six key areas of the economy. One or more **performance measures** have been developed for each goal. These measures are specifically defined data sets that are used to measure progress towards achieving the goals. They are not perfect measures, but they are indicators of progress. We can look at them and see where Maine is today relative to the goals. For each performance measure, there are **benchmarks**: targets of where we would like to be on each measure at a specific time in the future.

In keeping with its legislative mandate, the report takes the long view, 8-15 years, and defines the economy broadly: *Innovative Business, Skilled and Educated Workers, Vital Communities, Efficient Government, State-of-the-Art Infrastructure, and Healthy Natural Resources.*

The report is not just a business agenda, an environmental agenda, or a state government agenda. Rather, it is a broad-based agenda for economic growth. The Growth Council has tried hard to reach out to numerous organizations that have a stake in Maine's economic future, and their opinions are reflected in this work.

State legislators may use the report to guide their policy decisions; economic development leaders may use the report to focus special attention on local priorities; business leaders may use the report to set priorities. All Maine people may look to the benchmarks as a way to evaluate how we are doing as a whole at improving the economy and moving towards our long term vision.

The 56 indicators include:

Fundamental Performance Indicators

1. Gross state product
2. Personal income
3. Employment

Innovative Business

4. New Business starts
5. Job growth among new businesses
6. New products and services
7. International exports
8. Innovation assets
9. Manufacturing productivity
10. On-the-job injuries

Skilled and Educated Workers

11. High school diplomas
12. Associates' degrees
13. Bachelor's degrees
14. Graduate degrees
15. Life-long learning
16. Citizen opinion of educational opportunities
17. Employer sponsored training
18. Business opinion of Universities and Colleges

Vital Communities

19. Population of service centre communities
20. Family income disparity
21. Gender income disparity
22. Racial income disparity
23. County income disparity
24. County employment disparity
25. Employment of the disabled
26. Discrimination in the workplace
27. Jobs that pay a liveable wage
28. Voter turnout
29. Citizen participation in community activities
30. Business involvement in communities and schools
31. Arts and culture expenditures
32. Infant mortality
33. Cigarette smoking
34. Crime

Efficient Government

35. Citizen satisfaction with state government
36. Business satisfaction with state government
37. Fiscal stability and balanced revenue
38. State and local tax burden
39. Tax fairness

State of the Art Infrastructure

40. Road conditions
41. Condition of bridges

42. Modes of freight transport
43. Telecommunications
44. Cost of electricity

Health Natural Resources

45. Air quality
46. Water quality of lakes
47. Water quality of rivers
48. Water quality of marine areas
49. Conservation lands
50. Industrial use of chemicals
51. Paper and lumber value added
52. Paper and lumber employment
53. Volume of large sawtimber trees
54. Agriculture value added
55. Commercial fishing
56. Tourism employment

Contacts:

http://www.mdf.org/megc/growth00/

Appendix 2.

A Comparative Menu of Indicators of Success (selective Canadian and U.S. Community Indicators)

The following grid compares indicators adopted by Buffalo-Niagara Region; Jacksonville, Florida; Orlando & Orange County, Florida; Pierce County, Washington; and Sustainable Calgary and Edmonton LIFE (local indicators for excellence) compared with the quality of life indicators developed by the Federation of Canadian Municipalities (FCM) for 16 large urban centers. The FCM indicators have actual data for each of the 16 municipalities used, including Edmonton and Calgary. This grid shows the range of indicators that are potentially applicable to the Alberta Capital Region to measure both quality of life and indicators of success of regional governance.

Issue	Indicator	A. Sustainable Calgary	B. Edmonton LIFE – Local Indicators for Excellence	C. Federation of Canadian Municipalities Indicators	D. Buffalo-Niagara Region Indicators	E. Jacksonville, Florida	F. Orlando, Florida	G. Pierce County, Washington
Economy								
Employment	Employment concentration by sector (manufacturing, technical, managerial, and professional)				1.3			
	Unemployment rate by age group							
	Labour force participation (% employed compared to total population)							
	Net job growth				1.1			
	Total wage and salary jobs per employed resident							
	Number of basic industry jobs							
	Employment rate by age group							
	Permanent, Temporary and Self-Employment as % of population, % of total employed and by age and sex							
	Percent of unemployment which is long-term							
Income and wages	Hours (average earnings) required to meet basic needs at minimum wage (population with adequate after-tax disposable income to meet basic needs)							
	Median hourly wages by age and sex.							
	Weekly earnings (per job)				1.2			
	Employment income as % of total income							
	Manufacturing wage and salary earning as a percent of total income							
	Manufacturing wage and salary jobs as a percent of total jobs							
	Income distribution : disparity in family annual income (% of families with income in income quintiles)							
Employment insurance and social assistance	Percent receiving employment insurance and social assistance, by family type							
Financial health –	Personal and business bankruptcy							

[44] Percent of wage and salary jobs not in 5 most concentrated industries

Issue	Indicator	A. Sustainable Calgary	B. Edmonton LIFE – Local Indicators for Excellence	C. Federation of Canadian Municipalities Indicators	D. Buffalo-Niagara Region Indicators	E. Jacksonville, Florida	F. Orlando, Florida	G. Pierce County, Washington
bankruptcy	Municipal expenditure on debt (debt servicing as % of municipal expenditures							
Cost of Living – Food	Cost of a nutritious food basket (average weekly cost to purchase an assortment of food that provides a nutritious dietary balance by age group).				[illegible]1.5	*45		
Cost of Living - Housing	Housing affordability (home ownership)							46
	Median family income as a % of average value of dwelling (price and mortgage payments)							
	Median non-family person income as a percentage of average rent of a 2-bedroom apartment							
	Median family income as percent of average property tax on single family house							
	Average rent of a 2-bedroom apartment as percentage of medium family income							
	Gross rent spending 30% or more of household income on shelter costs							
	Residential property tax per capita							
	Taxable real estate value (per capita)							
	Housing starts							
	Real estate sales per capita							
	Average annual multi-family housing vacancy rate							
	Number of subsidized housing units per person							
Cost of Living - utilities	Real household monthly service charge for waste water treatment							
	Real household connect charge for waste water treatment							
	Average monthly residential solid waste charge							
Poverty	Foodbank demand - Number of people dependent on food banks				8.1[47]			
	Percentage of families that are low-income (LICO)							
	Child poverty							
	Students in free/reduced lunch programs							
	Providing shelter				8.2			
Business and Commerce	Number of business establishments							
	Net business creation (# new businesses established less businesses retired)							
	Development activity (housing starts, commercial, industrial, institutional, residential and miscellaneous permits)							

[45] Cost of 1,000 KWH of electricity
[46] Percent of households able to afford buying median single family house
[47] Feeding the hungry

Issue	Indicator	A. Sustainable Calgary	B. Edmonton LIFE – Local Indicators for Excellence	C. Federation of Canadian Municipalities Indicators	D. Buffalo-Niagara Region Indicators	E. Jacksonville, Florida	F. Orlando, Florida	G. Pierce County, Washington
	Emerging industry research and development patents (employment from research and development and no. patents)				Patents			
	Retail sales per capita (and as % of personal income)							
	Air traffic (number of passengers visiting and leaving Edmonton International Airport)							
	Tourism/bed tax revenues)							
	Airfares				1.7			
	Corporate revenues spent on training.							
	Cost of doing business				1.4			
	Trade: foreign exports				1.6			
	Venture capital				5.7			
	Value of industrial and commercial property							
	Value of business personal property per worker							
Government	Local government employment				3.1			
	Local government revenue sources				3.2			
	School district revenue sources				3.3			
	Local government debt				3.4			
	Cost containment				3.5			
	Bond ratings				3.6			
	Award-winning financial reporting				3.7			
	Property revaluation				3.8			
	Regional cooperation				3.9			
	City human-services expenditures per capita							
	Positive image of government							
	People feel comfortable voicing opinion							
	People who rate local government leadership as good/excellent							
	People who feel local public services are effective and interested							
Planning	Master planning and zoning				10.7			
	Alternative planning tools				10.8			
	County and regional planning				10.9			
	Planning coordination				10.10			
Transportation	Public transit usage				10.6			
	Average transit-trips per hour per bus							
	Private vehicle usage (vehicle miles traveled)							
	Road conditions				10.5			
	Average commuting time							
	Number of persons per passenger car							
	Miles of road in urban/city per vehicle miles traveled							
	Miles of state road in rural county per vehicle mile traveled							
Technological Infrastructure	Internet infrastructure				5.1			
	Computer use				5.2			
	Regional internet presence				5.3			

Issue	Indicator	A. Sustainable Calgary	B. Edmonton LIFE – Local Indicators for Excellence	C. Federation of Canadian Municipalities Indicators	D. Buffalo-Niagara Region Indicators	E. Jacksonville, Florida	F. Orlando, Florida	G. Pierce County, Washington
	Technology-based businesses				5.4			
	Technology workforce				5.5			
Society/ Community								
Arts, Leisure, Recreation and Culture	Hours of leisure relative to hours of work per week							
	Leisure activities (attendance-participation in social and recreational activities based on visitation to facilities, events and festivals)							
	Audiences for arts and culture				11.1			
	Audiences for sports and recreation				11.2			
	Affordability of family outings				11.3			
	Supports for the Arts				11.4			
	Preserving history				11.6			
	Hosting visitors				11.7			
	Municipal government parks/ recreation expenditures per capita							
	Sports conventions				11.8			
	Community centers per person							
Public Safety	Crime rates and rate of victimization							
	Violent crime				7.1			
	Property crime				7.2			
	Youth crime				7.3			
	Domestic violence				7.4			
	Drug offenses				7.5		[48]	
	Incarceration				7.6			
	Child and adult abuse				8.5			
	Fire				7.7			
	Emergency response				7.8			
	Motor vehicle accidents				7.9			
	Fear index: feeling of personal safety and security (how safe people feel)					[49]		
Community Design	Percentage of new communities and existing where density meets or exceeds city average; % of communities where occupants are within 400 meters of a mix of stores, services, transit, parks and open space.							
Sense of community and giving	% of citizens that had one or more persons outside their family they could call on in event of crisis.							
	Community connectedness						[50]	
	Percentage of lone-parent families							
	Homelessness							

[48] Measure of psychological well-being
[49] People feeling safe walking home at night
[50] data not yet available

Issue	Indicator	A. Sustainable Calgary	B. Edmonton LIFE – Local Indicators for Excellence	C. Federation of Canadian Municipalities Indicators	D. Buffalo-Niagara Region Indicators	E. Jacksonville, Florida	F. Orlando, Florida	G. Pierce County, Washington
	Charitable donations per capita (United Way contributions per resident)							
	Regional reputation				11.9			
Equity	Discrimination complaints filed and in the workplace							
	Equity in homeownership				9.1			
	Housing discrimination				9.2			
	Occupational equity				9.3			
	Women in leadership				9.4			
	Interfaith relationships				9.5			
	Disability and work				9.6			
	Intergenerational equity				9.7			
	Sexual orientation				9.8			
Democratic and political involvement	Voter enrolment and turnout				3.10			
	Daily newspaper circulation							
	Public environmental awareness and satisfaction							
Cultural diversity	Visible minorities employed by the municipal government							
Volunteerism	Number of inquiries for volunteer opportunities received by Volunteer Centres							
	Volunteer time (% of population volunteering per capita and hours volunteered).							
Education and Knowledge	Grade three achievement scores (student academic achievement; grade 3, grade 6, and grade 12)				4.3, 4.4, 4.5		[51]	
	Foundation for school				4.1			
	High school graduation rate							
	School mobility (% of students completing school year in the year they started)							
	Enrolment in post-secondary institutions							[52]
	Degrees awarded from county universities and community colleges							
	Dropout rate/graduation rate				4.7			
	Public school expenditures per student							
	Adult job-related education and training (# of education and training activities, # job-related education-training activities; # employer sponsored adult education-training activities).							

[51] math and reading scores

[52] attending college or technical school as percent of person age 20 to 24 years

Issue	Indicator	A. Sustainable Calgary	B. Edmonton LIFE – Local Indicators for Excellence	C. Federation of Canadian Municipalities Indicators	D. Buffalo-Niagara Region Indicators	E. Jacksonville, Florida	F. Orlando, Florida	G. Pierce County, Washington
	Educational attainment level of education or schooling				4.8	[53]		
	Life-long learning (% of population registered in adult continuing education course, borrowing from libraries)							
	Adult literacy							
	Environmental In-Service training for teachers							
	Library circulation				5.3	[54]		
	Student internet connections				[illegible]			
	Environmental content in the classroom							
	Student-teacher diversity and ratio				4.2			
Infants	Healthy birth weight babies (low-birth weight)							
	Infant mortality							
	Substance-exposed new borns per 1000 live births							
Children	Childhood inpatient asthma cases in local hospitals							
	Pre-school children with developmentally-appropriate behavior and skills. (% of children)							
	Quality child care				8.3			
	Early intervention to assist children (participation in Success-by-Six, Health-for-Two and other programs							
	Children in the care of public authorities							
Teens	Teen births per 1,000 residents							
	Alcohol and drug use by youth							
	At-risk youth				8.7			
Seniors	Elder care				8.4			
	Status of elders							
Disabled	Serving the developmentally disabled				8.8			
Health and wellness	Perceived quality of life						[55]	
	Self-rated health as good or better than same age bracket							
	Access to medical services (waiting lists for surgery, MRI and continuing care services)							
	Number of hospital beds available for continuing care, acute care, psychiatric care and other living centers.							
	Premature mortality (below age 75)							
	Deaths from heart disease and cancer							
	Accidental deaths per 1,000 population							

[53] % with post-secondary education
[54] Public library materials and book circulation per capita
[55] perceived quality of life as "good" or "to improve"

Issue	Indicator	A. Sustainable Calgary	B. Edmonton LIFE – Local Indicators for Excellence	C. Federation of Canadian Municipalities Indicators	D. Buffalo-Niagara Region Indicators	E. Jacksonville, Florida	F. Orlando, Florida	G. Pierce County, Washington
	Persons per traffic accident death and per traffic accident injury							
	Suicide rates per 100,000 residents							
	Consumption and use of addictive substances (dollar sales of alcohol, rate of drug possession, tobacco sales, tobacco-related diseases)							
	Mental health				6.8		[56]	
	Alcohol and drug treatment				8.6			
	Crisis calls and response times by type[n] (* Calls to Suicide distress line, Women's Shelters, Sexual Assault Centre, Gambling Line, rescue, and fire)		*			[57]		
	Smoking prevalence				6.7			
	Hospital discharges (as measure of hospital use)							
	Work hours lost due to illness or disability.							
	Physical activity (# of children and adults engaged in regular physical activity				6.6			
	(Health) Insurance coverage				6.9			
Environment								
Energy	Non-renewable energy consumption per capita (total energy (natural gas, electricity, and vehicle fuel use in barrels of oil per capita per year)							
	Renewable energy consumption (kwh/capita)							
	Total employment per industrial and commercial MWH consumed							
Food and local agriculture	Food grown locally (farmers markets)							
Land use	Urban expansion (land development sustainability)				10.1		[58]	
	Farms and farmland				10.2			
	Office and industrial space				10.3			
	Residential development				10.4			
Waste	Domestic waste per capita (kg. per person)							
	Recycling (kilograms per resident per year)				2.9			[59]

[56] drug charges used as proxy for psychological well-being
[57] rescue and fire
[58] annual growth rate in land area converted to urban residential relative to available "undeveloped" or natural land area.
[59] Percent of solid waste recycled

Issue	Indicator	A. Sustainable Calgary	B. Edmonton LIFE – Local Indicators for Excellence	C. Federation of Canadian Municipalities Indicators	D. Buffalo-Niagara Region Indicators	E. Jacksonville, Florida	F. Orlando, Florida	G. Pierce County, Washington
Water	Average water use (litres) per capita per day							
	River, lake or surface water quality (fecal coliform count and upstream-downstream)				2.3			
	Ground-water quality and levels in aquifer wells							
	Gallons of waste water processed as percent of permitted capacity							
Air	Index of air quality (% of days air quality rated good)				2.1			
	Total air emissions (by type)							
Wildlife	Christmas bird species count							
Toxics	Amount of pesticide used by Calgary Parks and Recreation							
	Chemical releases				2.2			
	Hazardous waste sites				2.4			
	Brownfields				2.5			
	Mfg. Workers per pound of toxic chemicals released into air							
	Mfg. Workers per pound of toxic chemicals released into water							
Parks and Open Space	Urban green space (area of parks per 1000 people)				11.5			
	Public tree canopy							
Ecosystem Health	Ecosystem health				2.6			
	Endangered lands				2.7			

Sources:

Edmonton LIFE – Local Indicators for Excellence. Edmonton Social Planning Council. 1997

Orlando and Orange County, Florida. *Compass Index of Sustainability 1990-1999.* March 2000. Personal communication with Alan AtKisson (AtKisson and Associates).

Pierce County, Quality of Life Benchmarks – Annual Report. Pierce Count, Department of Community Services. Pierce County, Washington. February 1998. http://www.co.pierce.wa.us/

Quality of Life in Canadian Communities. The FCM Quality of Life Reporting System. May 1999.

Quality of Life in Jacksonville: Indicators for Progress. www.jcci.org/qol/qol.htm. 1999

State of the Region: Performance Indicators for the Buffalo-Niagara Region in the 21st Century. Institute for Local Governance and Regional Growth. http://regional-institute.buffalo.edu 1999

Sustainable Calgary: State of Our City Report 1998. Sustainable Calgary

Other Community Indicator Sources

Centre for Excellence for Sustainable Development: Measuring Progress
http://www.sustainable.doe.gov/measuring/melocal.htm

Canadian Council on Social Development
www.ccsd.ca/pr/psihle.htm

Conference Board of Canada
www.conferenceboard.ca/pubs/

Edmonton
www.gov.edmonton.ab.ca/planning/

Federation of Canadian Municipalities
www.fcm.ca

Florida
fcn.state.fl.us/eog/govdocs/gapcomm/critical/critical_bnchmks/critical_benchmks_pdf.html

GPI Atlantic
www.gpiatlantic.org

Hart Environmental Data
www.subjectmatters.com/indicators/

Hamilton-Wentworth
www.vision2020.hamilton-went.on.ca/indicators

Human Resources and Development Canada
www.hrde-drhc.gc.ca/stratpol/arb/publications/

Minnesota
www.mnplan.state.mn.us/press/mm-92.html/mm/aboutmm.html

Pembina Institute for Appropriate Development
The Alberta Genuine Progress Indicator (GPI) Accounting project
www.pembina.org

Portland, Oregon - Metro
www.metro-region.org/growth/doclibrary

Redefining Progress, San Francisco (Community indicators program)
http://www.rprogress.org/progsum/cip/cip_main.html

Sustainable Seattle
http://www.scn.org/sustainable/Indicators/indicators98/excerpts.htm

Twin Cities Metro Council
www.metrocouncil.org/metroarea/pubmain

Ontario
www.qli-ont.org/qlispring99.html

Oregon
www.econ.state.org.us/OPB/
www.econ.state.org.us/opb/orshines/pdf

Winnipeg
www.city.winnipeg.mb.ca/city/html/govern/corporateframework/plan_wpg.htm

Redefining Progress
www.rprogress.org/pubs/pdf/SocIndHist.pdf
Toronto
www.torontovitalsigns.com/intro.html

Treasury Board
www.tbs-sct.gc.ca/rma/communic/prr99/mfr99

United Kingdom
www.environment.detr.gov.uk/sustainable/quality/life

Appendix 3.

Current Municipal Indicators in the Alberta Capital Region

1. City of Edmonton

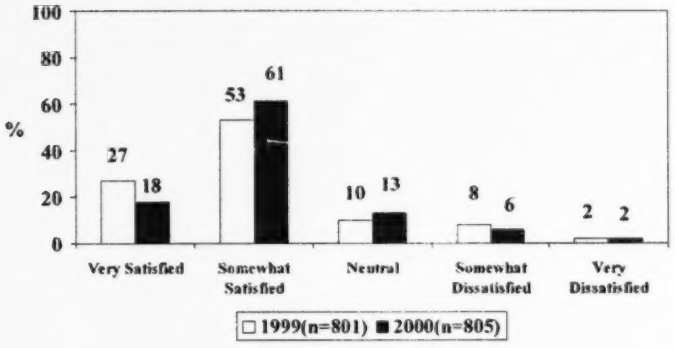
(City of Edmonton Corporate Business Plan 2001 to 2003)

The City of Edmonton's performance in addressing the corporate goals arising from *Plan Edmonton* and the priorities in the Corporate Business Plan can be evaluated using a variety of performance measures. The following table indicates performance measures within Administration responsibility, their source, and the 2000 performance. In addition to these "corporate" performance measures, individual departments maintain a set of operational performance measures, some which may or may not be relevant to measuring regional success.

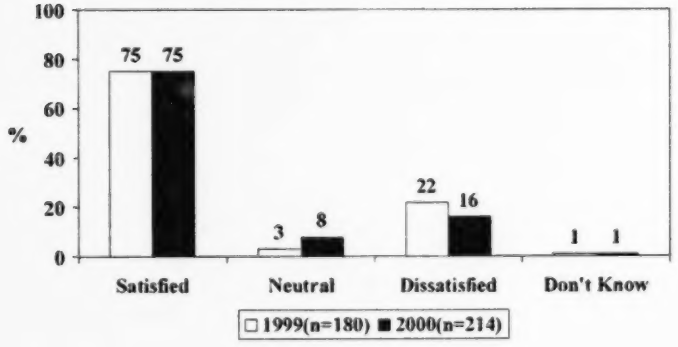
Performance Indicator	Source	2000 Results
Citizen satisfaction with City services	Citizen Satisfaction Survey	18% Very satisfied 61% Somewhat satisfied
Citizen satisfaction with contact with civic employees	Citizen Satisfaction Survey	49% Very satisfied 26% Somewhat satisfied
Citizen perception of value for tax dollar	Citizen Satisfaction Survey	10% Very good value 45% Good value
Citizen perception of service quality	Citizen Satisfaction Survey	6% Increased quality 75% Same quality
Residential property tax comparison	Property Tax and Utility Charges Survey	Fifth lowest among major Canadian cities Third lowest in Edmonton region

The following figures are from the "City of Edmonton 2000 Citizen Satisfaction Survey", Final Report, April 2000, prepared by Banister Research and Consulting Inc. The term "n=" refers to the number of citizens surveyed for the respective question, with a slightly larger number survey in 2000 compared to 1999.

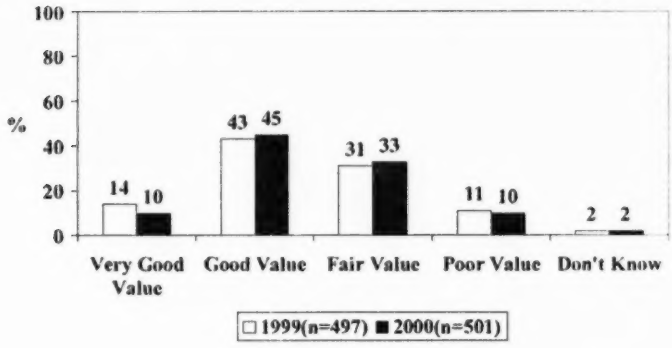
Overall, How Satisfied Are You with The Services Provided By The City of Edmonton?



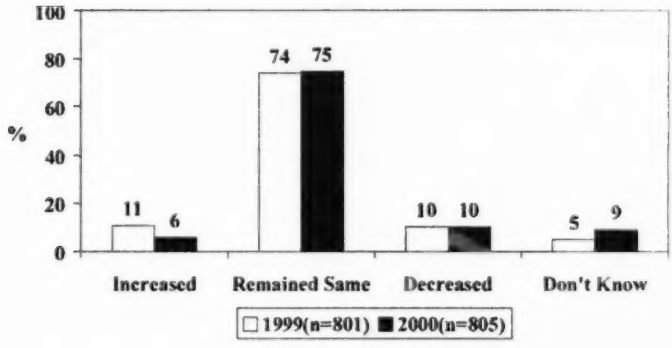
Overall, How Satisfied Were You With The Service Provided by The City of Edmonton Employee You Last Contacted?



Thinking About The Percentage of Taxes You Pay For City Services, Would You Say You Receive ... For Your Tax Dollar

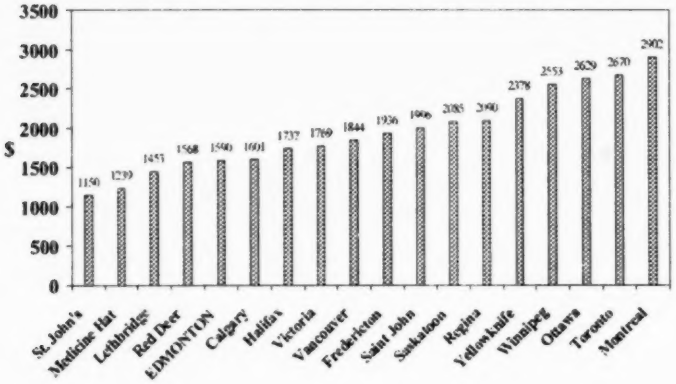


Over The Last 12 Months, Would You Say The Quality of Service Provided By The City of Edmonton ...?

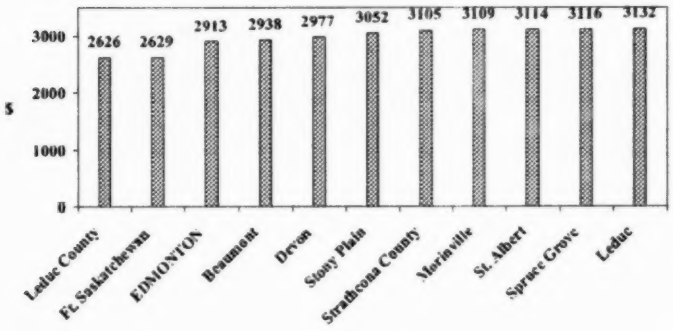


The following information was taken form the "1999 Residential Property Tax and Utility Charges Survey", December 1999, prepared by the City of Edmonton Planning and Development Department

Total Property Tax for Single Family House in 1999 - Canadian Cities



Total Property Tax and Utility Charges for a Single Family House in 1999 - Edmonton Region



2. Strathcona County/Ft. Saskatchewan (Success Measures)

Strategic Plan Review (annual)
Ability of the County to achieve objectives and strategic initiatives identified in the Strategic Plan and 3-year Business Plan

Financial and service measures
- balanced budget (operational and capital)
- debt position & status of reserves
- program/service usage statistics* (number of swimmers, fire response times, etc.)
- service delivery costs* ($'s per hr. to operate arena, $'s per hectare to cut grass, etc.)

** we have extensive information on specific program/service standards over time*

Public satisfaction survey
(annual survey of 500 residents)
- overall quality of life in community
- safety
- core municipal services
- customer service
- environment
- fairness in providing balanced services
- quality and amount of new development
- value for tax dollar

Environmental assessments
- air and water quality testing
- wildlife counts

Economic development
- housing starts
- building permits
- commercial development (dollars and square feet)
- number of businesses

Provincial comparisons of similar municipalities
- services per capita (e.g. firefighters/1000 residents)
- employees per capita
- representation (residents/Councilor)
- tax dollars per capita for services

Internal & external data analysis
- employment rates
- income figures
- community demographics (single parent family, seniors, etc)
- vacancy rates and availability of housing

Community surveys, needs assessments and focus group meetings

Strathcona regularly surveys specific target groups to determine needs, assess service satisfaction and seek community input.

Appendix 4.

Record of Discussion of Indicators Workshops

ALBERTA CAPITAL REGION GOVERNANCE REVIEW

BUILDING FOR OUR FUTURE

4 July, 2000

TO: Participants at the Indicators of Success Workshops June 29-30, 2000

FROM: Bill McMillan

Project Coordinator, ACRGR

RE: **RECORD OF DISCUSSION OF REGIONAL MEASURES WORKSHOPS**

We would like to thank you for contributing your insights and wisdom to the June 29-30 regional "indicators of success" workshops. Overall, the workshops were a success in soliciting your guidance and advise on moving towards a framework of indicators for measuring the success and quality of life for the region, as part of a regional governance system.

Please find enclosed (by email attachment) the record of discussion of the three regional measures workshops held June 29-30, 2000.

The next phase of the project will entail a cross-jurisdictional analysis of indicators currently used by each of the 22 municipalities in the region against the "benchmark" indicator frameworks examined during the workshops. Comparing the municipal indicators with other indicator frameworks, along with your input and guidance from the two days of workshops will help shape a holistic indicators framework. This will be the basis of our future discussion at a joint plenary in later August/early September. This workshop will bring the prior three workshop groups together to examine and discuss a complete measurement framework to assist Capital Region governance.

If you have any questions or require more information, please contact **Mark Anielski** at the **Centre for Performance Measurement and Management** at **492-1371** or by E-mail at anielski@ualberta.ca

Sincerely,

Mark Anielski and Bill McMillan

Regional Measures Workshops

Location: Faculty of Business Building, University of Alberta

- June 29, 2000 (Environmental Indicators Workshop (9:00-12:00 noon) – Rm. 416 Bannister
- June 29, 2000 (Economic Indicators Workshop (1:00 – 3:00 pm) – Rm. 416 Bannister
- June 30, 2000 (Societal Indicators Workshop) (9:00 – 12:00 noon) – Rm.4-04

Overall Synopsis of Workshops

Overall, the three workshops were a success in soliciting input and advise on the development of a framework of indicators to measure success and quality of life for the Capital Region. The groups complimented each other in covering different aspects of indicator issues, including: a) issues related to accountability for indicators and results; b) characteristics of good indicators, and: c) quantitative (objective) indicators versus soliciting attitudes/opinions from citizens aligned with the various issue categories identified for environment, economy and society. The groups provided guidance on which indicators from the potential menu (aligned with issues) might be both meaningful and available at the Regional and municipal level. One of the next steps in the project will involve the Centre for Performance Measurement and Management examining existing indicators used by municipal governments and data constraints (federal and provincial government sources), both providing a basis for shortlisting a potential indicators framework for the Region. This analysis will be completed by the CPMM in consultation with municipal representatives and with indicator/data experts.

The next steps in the project will involve consulting with either a smaller focus group in August, composed of members from each of the three workshops to examine a "short list" of potential indicators for the Region. A proposed indicators framework will then emerge that will also include a proposal for how indicators would be used for governance and growth management at a Regional and municipal district level. This will be the basis for discussions at a plenary workshop in September to examine a proposed indicators framework and its utility for governance and growth management.

June 29, 2000 Environmental Indicators Workshop

WORKSHOP ON ENVIRONMENTAL INDICATORS	
When: June 29	
Time:	9:00 am to Noon
Location:	Banister Boardroom (Room 416)
Faculty of Business, University of Alberta	
Leader:	Dr. Ray Rasmussen

Attendance:

Environmental Indicators
Chair: Dr. Ray Rasmussen 492-3949 ray@raysweb.net
Brian Free (Alberta Environment)
Nick Tywoniuk –
Richard Dixon (Alberta Environment)
Gary Woloyshniuk – (Pembina Institute)
Shelley Sabo (Environment Canada)
Len Douziech (St. Albert)
Ken Hodgins (Fort Saskatchewan)
Kevin Glebe (Strathcona County)
Ken Hodgins (City of Ft. Saskatchewan)
Chuck Chamberlin (Sierra Club)
Mark Brostrom (City of Edmonton)
Gary Wolosyniuk (Pembina Institute)
Pat Klak (Leduc/Nisku Economic Development Authority)
Dan Eckel -
Peter Duncan (Sierra Club)
Lou Hyndman (Alberta Capital Region Governance Review)
Mark Anielski (CPMM - University of Alberta)

Record of Discussion

1. Introduction
Following introduction to the indicators project a lively discussion ensued regarding clarification of the purpose of the project. Some of the key points raised included:

What is the purpose of the indicators: 1) measuring performance to citizens or 2) measuring municipal practices and operations? We need both omnibus (macro) and operational indicators for both operational management and reporting on quality of life to citizens.

What should and shouldn't be on the list of indicators and how should they be used?

Need to discuss future governance and responsibility-accountability for indicators. Who is accountable for gathering, reporting and results?

What is a meaningful benchmark for the Alberta Capital Region? Do we really want to use other indicators from other North American cities or regions?

We need to develop indicators that compare progress over time as well as performance relative to other communities within the region or in comparison with other regions.

Indicators are useful in policy making since they provide a reference point against which future progress can be assessed.

Other categories of indicators:

The working group was asked to identify other indicators or categories that were not identified in the inventory developed by Mark Anielski. The following proposals were made:
Qualitative indicators (awareness, satisfaction, use (participation), perceptions)
Transportation of toxic waste
Economic considerations
Budget (expenditures related to the environment)
Expenditures
Green procurement
ISO 14000 businesses (Environmental Management System and use of the EMS framework for municipal governance)
ecotourism
Noise pollution
Light pollution
Enjoyment of environment (indicators of enjoyment and satisfaction with experience)
Environment-Health related indicators
Social considerations
Regional considerations of complimentarity and consistency.
Trade issues (material, energy (power, gas))
Transport of toxic waste

Three Tiers of Indicators: John Dixon of Alberta Environment suggested considering indicators along three tiers or levels, similar to the European community.

Level 1: ambient indicators (air quality)
Level 2: behavioural indicators (emissions)
Level 3: response (financial, spending)

Another way of developing environmental indicators is through the development of natural resource and environmental accounts for the Region that would include physical accounts and monetary accounts of natural resource and environmental capital/wealth.

3. Review of Indicators Inventory/Menu

The remaining part of the workshop focused on the list of environmental issues and indicators developed by Mark Anielski, based on a survey of relevant indicator framework from across North America, including Edmonton (Edmonton LIFE) and Calgary (Sustainable Calgary). The desired outcome of this discussion was not derive a short-list of indicators, per se, but to engage participants in a dialogue as to what indicators would be both relevant and desirable for the Capital Region. The next stage of the project will entail examination of indicators currently used by municipal governments or that are available from the provincial or federal government at the sub-regional (municipal) level. In addition, a "reality check" is required as to the availability of data at the municipal level.

Energy

- Need to look at use of indicators of GHG emissions per capita.
- FCM is looking at GHG emissions by municipality.
- Households and transport is using much more energy than ever before, larger houses, larger cars though more efficient (we believe we are more efficient).
- Full life-cycle analysis (as a tool for analysis) may be useful
- Break down energy users (transportation, households, buildings, industry)…need to have the key contributors or users identified.
- Cost of power.

Ecological footprint: the land and resources required to meet the needs of citizens in the region and the impact of household consumption outside our boundaries. Energy, food and shelter, and other footprints (the amount of energy or materials required to meet current consumption needs). The EF does provide a useful measure of sustainable living and can be compared across time and across communities. Data is available through Statistics Canada for at least at the large municipal level (Edmonton) using household expenditure data to estimate these footprints.

Food and local agriculture:

- Problem with measuring local-source of farmer market produce and goods.
- Organic farms or local produce producers as a proxy.
- Agriculture land use will properly capture
- Import and export of local produce.
- Self-sufficiency of food supply
- Market gardens and household gardens as well.
- The full-cost of food (including the energy footprint analysis).
- Amount of energy required to produce calories of energy….comparing energy required to produce food versus how many calories that are yielded.

Land Use

- Need to account for preserved (non-developed, protected) lands
- Need to role in parks and open space
- Land used for automobiles, roads, parking lots, and public transit
- Proximity issue of services…household to services, work, recreation.
- Country residential is an important issue (proliferation of acreages that require services) and distinguishes acreage from farm/agriculture use.
- Taxation by land use ($/ha): business, households, total public infrastructure (roads, sewers, other), farmland, and recreation/open space.
- Livestock intensity measure on the land (re: water quality)….livestock operations (external) impact on local environmental conditions.
- Number of farmers and average size of farm (also ownership; owner-operated or corporate/absentee landlords).
- Industrial and light industrial land use
- Density measures as proxy for land efficiency and sprawl indicators
- Soil quality.

Waste

- Total as well as per capita
- Land fills: use of landfills (methane), amount going to landfills, amount recycled
- Waste imported and exported out of various regions

- Waste should be percentage basis of waste recycled.
- Industrial vs. household/residential waste split
- Good waste indicators from FCM and Environment Canada
- CO2-equivalency per capita of waste
- Tons of compost

Water

- Drinking water quality
- Ground water quantity and levels
- Surface water quantity (flow rates and withdrawals)
- Health-related issues: illness, disease, and death related to water quality (Wakerton, Ont)..public health people have this under control (e.g. potable water)....needs to link health and environment.
- Waste water treatment levels (could be put in with waste category, including storm drainage and waste water)
- Toxic chemical content in drinking water (what is exactly in the water)....need uniform standards.
- Fish and biological activity in water as an indicator of water (e.g. biological health, sturgeon count)
- Historical data/pictures on historical streams, wetlands, ground water (levels) showing location, flow rates (e.g. does your neighborhood sit over what was once a stream).

- Other comments related to water:
- Federal/provincial river basin study had many recommendations, very few of which have been implemented or addressed.
- What about responding and accounting to citizens from such studies.
- Is it necessary to treat all of the water in the system, since much of the water is not required for potable (like Europe), but would require different infrastructure.
- Need a regional land use planning authority that actually has authority or power..this is the key to the whole regional governance.. now have 21 separate municipalities acting differently.

Air quality:

- Caution with use of indexes: does the indicator "good air quality days" really measure what we want or do we need others?
- Toxics and other detailed emissions are things we are not monitoring.
- Can we create an equivalency indicator related to GHG emission
- What about corridor or neighborhood air quality issues
- Distinguish between emissions and benchmarks or standards.

Wildlife

- Need to expand to include mammals, invertebrates (bugs).
- Insect counts (butterflies, dragon flies)...
- Species counts by school children might be used to solicit input.

Toxics

- Pesticide use for both public spaces and households/businesses.
- Measure of decreasing amounts of pesticides

- Brownfield (toxic sites)… area that is contaminated and outstanding liability and inheritance of toxic soil and sites.
- % organic versus % non-organic (chemical inputs)
- Land area treated with chemicals (e.g. area sprayed)
- Dollars expended on pesticides/herbicides per ha of land used as a proxy for volume of use. Can we get the details?
- "Toxic footprint": pesticide use.
- Chemical releases per year per 1000 people.
- Environmental infractions.
- Deep wells and annual flow under the Capital Region.
- Percent of region that is served by household hazardous waste removal/recycling.
- Health related risk (liabilities) concerns (tied to toxics)… pathways to exposure (drinking river water, treated wood)… providing measures of risk….

4. Process and Implementation Issues

A discussion about the process and implementation of the Capital Region indicators of success ensued with the following points being raised:

- Land use planning: growth management (land use, density) issues necessitate a method of land use planning that is regional vs. 22 municipal government versions of land use planning. Need to develop a regional authority or body that deals with land use planning and growth management.
- Issues of importance and validity of the measures to citizens.
- Need to allow for differences of opinion of value of indicators.
- Benchmarking and network committed to collect the indicators and make them work, including reporting. Need to benchmark the really important indicators
- Need political commitment to development and reporting of indicators
- Public involvement and citizen engagement is critical. To be successful, we need citizens involved. Experience in other jurisdictions shows that public involvement can sway political commitment.
- Need to show people how these indicators are important and of value to citizens.
- Must deal with frustration with information-overload keeping the indicators view yet relevant in number. Need to ensure confidence of the data, so have problem with working with the information. Need to connect to existing mechanisms in place that are already collecting information.
- From a taxpayers perspective it makes sense to what is available and make adjustments for missing pieces.
- Governments probably already know where the problem areas are and what needs to be addressed. Need to deal with the issues as they are and as they are arising and make the tough decisions. Need to ensure playing field is even for everyone and that the process is inclusive.
- Economics plays a big part in deciding what standards and indicators you use and deal with comparative
- Need to consider using existing federal government indicators of environment for comparability across Canada and for a reliable source of data.
- Need an outreach program to citizens.
- Build on a repository of indicators across jurisdictions and data.
- Provide indicators used by individual municipalities. As we create uniformity we will have better indicators to measure us by locally, provincially and internationally.

- Need to create a positive space for voluntary input from citizens; an incentive to brag about your community and voluntary input and reporting (get people engaged and excited).
- Need to solicit citizen "perceptions" or "opinions/feelings" about the environment along with so-called objective indicators.
- Need to consider innovative ideas for including citizens in the measurement and data collection, for example, engaging school kids in doing wildlife counts.
- The challenge with indicators is creating a meaningful yet short list.
- It may be important or desirable to choose indicators that allow us to compare against each municipality in the Region as well as against other communities in North America.
- You have to come up with a "straw model" or ideas and let public react to them, buy in and then let citizens influence the future.
- EMS (Environmental Management Systems) might be considered as a means of implementation and governance.
- Need a regional land use planning authority that actually has authority or power to make decisions as a collective. This is the key to the whole regional governance.

June 29, 2000 Economic Indicators Workshop

WORKSHOP ON ECONOMIC INDICATORS	
When: June 29	
Time:	1:00 to 3:00 pm
Location:	Banister Boardroom (Room 416)
Faculty of Business, University of Alberta	
Leader:	Dr. Michael Percy

Economic Indicators Working Group
Chair: Dr. Michael Percy: 492-2456 michael.percy@ualberta.ca)
Ted Chambers (University of Alberta)
Mark Anielski (CPMM - University of Alberta)
Perry Kinkaide (KPMG)
Raj Gill (Alberta Economic Development)
Ken Hodgins (Fort Saskatchewan)
Larry Hornecastle (St. Albert)
George Huybregts (Assoc. Commissioner, Strathcona County)
Gord Harris (City of Fort Saskatchewan)
Ayal Dinner (Sierra Club)
Darla Simpson (Alberta Environmental Network)
Lou Hyndman (Alberta Capital Region Governance Review)
Bob Thompson
Rick Hersack (Economic Development Edmonton)
Liz Campbell (Economic Development Edmonton)

Record of Discussion

Introductions

The terms of reference of the Alberta Capital Region Governance Review was introduced b y Lou Hyndman, with Mark Anielski introducing the indicators of success and quality of life initiative.

The group discussed some of the issues that needed to be considered in developing economic indicators of success for the Capital Region, these included:

- Access to markets issue less important to the Capital Region (Mike Percy)
- Regional indicators must be more broad based (Mike Percy)
- There is a fundamental lack of intellectual and knowledge capital indicators in the menu developed for other North American communities that should be consider for the Capital region. (Mike Percy)
- Indicators of foreign direct investment is lacking, both as a category and indicators
- Issues of qualitative or opinion combined with objective indicators
- Indicators or accounts of progress should provide both historical account of where we have been as a basis of discussing where we are going.
- The criteria for good indicators needs to be upfront. These criteria should include reliability, cost and utility (towards what end)…
- We want to ensure measurement of progress towards the vision and goals of the Capital Region. Utility of the indicators is fundamental
- The best measure of success might be to ask citizens "are you satisfied with where you live?" through opinion surveys. Perhaps the design of key questions is the best approach to understanding economic well-being and progress?
- The purpose of the indicators is as a means of outreach and reporting to citizens
- For the community of St. Albert the following four issues are the most important (Perry Kinkaide):
  - prosperity
  - relationships
  - individual values
  - barriers in the community that impede self-reliance.

Issues and Indicators Missing:

The group engaged in a discussion of the key economic issues and indicators that may be relevant to the Region but are otherwise missing from other community indicators from the menu developed by Mark Anielski. These include:

- Innovation and technology, both as an issue and measures. Many people have good ideas that don't get off the ground; how do we measure?
- Full environmental and social costs of economic development
- Self-reliance: what does it mean for any individual municipality. Eg. small business is a great form of employment but not wealth generation; large business creates wealth. What is our goal?: Do you want an economy of small businesses that serve large community or more wealth from larger business?.
- A lot of the measures used by other communities reflect a "smokestack" approach to measurement (eg. Pierce County)

- Intellectual Capital: What is absent here is knowledge based industry indicators…person to person issues… given our region is spatially remote the issue of how we are tied into the rest of the community or other communities needs to be understood/measured. (e.g. E-commerce business)

- We need to avoid over-engineering the indicators, keep them simple, few and relevant. Perhaps we let take an entropy approach and let macro measures lead us to the discussion of right indicators.
- Liz Campbell/Rick Hersack of Economic Development Edmonton noted that EDE has considerable data for the region, looking at many of the issues and indicators identified in the menu of indicators developed by Mark Anielski. Much of the information we require may already be available without too much additional effort.
- Entrepreneurship is missing in the language
- Risk capital indicators are missing
- E-Commerce capacity: Western Economic Diversification (Jason Brisbois) referenced a study on the readiness of the Western provinces to be ready for e-commerce.
- Efficiency of transport (for example, postage service within the region).
- Small business in Canada need more information and less government.
- Connectivity –
- efficiency of communication and movement of information
- bandwidth
- Domestic ownership vs. foreign ownership
- Number of IPOs
- Level of cooperation and
- Competitiveness (based on levels of cooperation and collaboration)
- Cottage industries- home based business
- Diversity of economy – do we value diversity and how do we measure.
- Economic or other sustainability
- Return on taxation measures – (Liz Campbell)… can then look at taxation rates for various businesses to attract the businesses we desire….can then assess what a community if willing to pay for the return desired.

- The group discussed the characteristics of indicators or measures:

- Outcome measures – broad (quality of journey); personal satisfaction
- Output measures – the dashboard that shows; more detailed indicators to citizens and used for governance
- Input measures – engineering and mechanics – detailed inputs (materials used to build engine and engineering).
- Core indicators versus detailed.
- Strategic versus tactical indicators
- Indicators that reflect direction or trends
- Need indicators that are meaningful for each community as well as at the Regional level.
- Indicators that reflect maintenance versus new infrastructure (new development)

The group questioned:

- Whether tradition/current economic indicators really matter and resonate with citizens?
- Whether the purpose of indicators is to market externally to attract business?

3. Review of Indicators Menu

The remaining part of the workshop focused on the list of economic issues and indicators developed by Mark Anielski, based on a survey of relevant indicator framework from across North America, including Edmonton (Edmonton LIFE) and Calgary (Sustainable Calgary). The

group did not complete review of the entire list of issues/indicators menu. There was a general discussion as to whether traditional economic indicators, as reflected in the list of indicators used by other jurisdictions, is indeed what we want for the Capital Region. Some suggested we might consider simply asking citizens questions about their economic quality of life or well-being rather than spending resources collecting traditional indicators.

The following issues/indicators were discussed and the respective comments resulted. Some new issues or indicator were identified by the group:

Employment – why is employment important? Because it is important to quality of life.
Quality of employment from the investment in education

- Re-employment as indicator of resiliency and adaptability.
- Strategic indicator: job growth (net job growth)
- Employment statistics are kept at the household level even if the household is employed elsewhere.

Retail sales (macro indicator) – e.g. housing sales, appliances, home maintenance expenditures.

Net business creation (Bankruptcy rates) – an important indicator of health of business community

Knowledge based economy measures needed, for example:
Proportion of employment that is higher skill attainment

Prosperity measures:
median or average income (average compared with median income) by source
look at retirement community (income and resiliency)
where people are spending money, look at expenditure breakdown by household/family type

In-migration/out-migration – as a measure of the health and resiliency of economy and region

Resident employment – non-resident employment

Money spent in the community versus outside – reference was made to an ACRA study of shopping trends and spending patterns as a potential source.

Cost of living/cost of doing business
housing, transportation
utilities
taxes
measures that attract tourism (e.g. expressed in US $)…for citizens or for marketing
measures of "return on taxes" (services, satisfaction) received by households, business and other organizations

Transportation: both in terms of costs of transportation and time dimensions (commuting, commercial transportation time)

Cycles in the economy – may need to explore measures that show the stability of the economy

Sustainability, strength and continuity of the economy, : indicators that provide a broad assessment of sustainability and resiliency of public utilities (e.g number of brownouts). Mention

was made of a recent study by KPMG that appeared in the Calgary Herald showing Edmonton's economy as more diversified, resilient and stronger in contrast to Calgary's economy.

Property values: Some suggested, Municipal Affairs as a source of data, for property values by municipality based on market value assessments. Property values can be a tremendous indicator of the economic health of both households (residential) and commercial (business) property.

Occupancy rates

Cost of space

Investment measures...indicators that show the health of investment and financial capital availability in the Region.

June 30, 2000 Societal Indicators Workshop

WORKSHOP ON SOCIAL INDICATORS	
When:	June 30
Time:	9:00 am to Noon
Location:	Room 404
Faculty of Business, University of Alberta	
Leader:	Peter Faid, Community Services Consulting

Societal Indicators Working Group
Chair: Mr. Peter Faid
Rhonda Baxter (Edmonton Social Planning Council)
Rick Wallace (Strathcona County)
David Turner (Strathcona County)
Jackie Winter (Family and Community Services, Strathcona County)
Audelle White (St. Albert)
Sharon Mathias (Matthias Consulting)
Pat Klak – (Leduc-Nisku EDA)
Karin Debenham
Barry Breau -
Darla Simpson (Alberta Environmental Network)
Mark Anielski (CPMM- University of Alberta)

Record of Discussion

Introductions

Like the other groups, the discussion began with a review of the terms of reference of the project with a focus by the chair on the vision and goals of the Capital Region so as to provide guidance for selecting appropriate indicators of success. Some of the comments made included:

There is a wealth of indicators; probably too many
Are the indicators to be applied to all 21 municipalities or selected ones? Mark Anielski noted that the goal was to select a common set of indicators for all municipalities while allowing each municipal government to adopt their own customized list relevant for their own community and governance requirements.

Asset-based indicators would be important -- the gifts and strengths of the community. May develop assets (stock), liabilities, flow (use/demand/deficits) and expenditure (GPI) framework and accounts, including time use accounts along with expenditure profile
Indicators have come and gone over the last 30 years; is this just a fad that will pass or why should we consider the investment today?

- We must be careful about the "tyranny of the averages" with statistics that may mask important issues that lie at the margins.
- What is the purpose of these indicators? For regional budgeting and reallocation of resources? For reporting to citizens?
- How will we ensure the indicators are used for management and accountability to citizens and not simply d put on a shelf? Will they have any utility?
- Problem raised about whether values should precede discussion of the indicators.
- Posing questions to citizens related to satisfaction of life and value of municipal services may be as important as traditional objective indicators. A University of Toronto study asks 1) how important is this to you? and 2) how satisfied are you with the availability and quality of your experience?
- May want to consider qualitative questions (how would you rate ____ (issue)?, how do you feel about ____(issue)?, for each of the issue categories.
- Should attempt to compare the available supply of services vs. use of services (demand)

2. Characteristics of Good Indicators

Peter Faid led the group in a discussion of identifying the characteristics of good indicators. Some of the key issues raised included:

- Need account of "assets and "liabilities" or deficits of communities
- Perception versus objective/statistical indicators
- Data availability and consistency of sources over time
- Perceptions of what is good and not good is important
- Reporting to whom and what purpose? (province, federal, local?)
- Accountability for measures? Who? What scope?
- Indicators can help to prevent "mudslinging" and rhetoric that is not based on "reality"
- What if we ask questions about feeling of inclusiveness, connections with others.

Mark Anielski provided the following list of characteristics of good indicators based on his recent work with the Yukon Government in developing a measurement framework for assessing sustainable development. In general, a common set of characteristics of what constitute effective indicators is emerging. [60]

Relevant and Meaningful
Fits the purpose for measuring (goals, desired outcomes)
Reflects the most important factors and issues meaningful to the community
Indicator provides a reasonable proxy for value being tracked

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[60] Source: *Yukon Sustainable Progress Indicators: Framework, Indicators and Implementation Approach for Reviewing the Yukon Economic Strategy*. Prepared by the Pembina Institute for Appropriate Development for the Yukon Council on Economy and Environment, March 31, 2000.

Measure results, not just process

Understandable and Inclusive
Easily understood by all citizens
Citizenry are consulted and feel buy-in to the set of indicators

Practical and Timely
Manageable number (i.e. not too many)
Practical and affordable: not too complex or expensive to monitor
Data is available (now or in future), and on a timely (e.g. annual) basis

Reliable and Objective
Trust in what the indicator shows
Indicators that measure what it says it will be measured
Objectively measurable
Based on timely and reliable data
Represent quantitative as well as qualitative attributes
Can be consistently measured over time for assessing trends
Monetary and non-monetary indicators
Grounded in well-established theory

Useful
Can be linked to desired outcomes, goals, objectives, or targets
Shows the links among the economy, environment and society
Focus on the long range view
Comparable to other regions
Tailored and usable by communities
Useful to policy makers
Can be integrated into decision making

3. Other Data Sources

Other data sources for social indicators were offered by the group which include:

- Health Canada statistics (by postal code) – Sharon Mathias
- Success-by-Six – Edmonton Social Planning Council
- CASA (Clean Air Strategic Alliance) for air quality statistics
- Environmental indicators - study compared air conditions Capital Health Authority (looked at household and outside air quality…get access.
- Municipal Affairs does community comparison of spending on services.
- Time Use Surveys from Statistics Canada – would be vital
- Harvey Krahn – U of A Population Research Lab.

4. Review of Indicators Inventory/Menu

Arts, Leisure, Recreation and Culture

- Linked to income (affordability)
- Accessibility measure (and is it linked to demographics, e.g. youth, seniors etc.) – fee structure
- FCM community stress indicators are good

- Challenges of collecting recreational facility visitation data because of changes in methods of attendance stats.
- Sitting in front of the TV (time spent TV viewing)
- Include theatre use
- Location of where the leisure is enjoyed
- Time-use surveys might be useful

Public Safety
- Like the fear index (Edmonton Police Service)… Rhonda Baxter
- Pop Research Lab also has data…(Peter Faid)
- RCMP reports differently than city policy forces.
- Restorative justice (community conferencing, mediation).
- Victim of crime stats and reporting

Community Design
Mobility and access (transportation) is also critical
Spatial removal from services that require vehicles do provide "quiet community space" that may be an asset.

Sense of community and giving (social cohesion/community stress)
Must be more inclusive with respect to connective-ness (extended family).
Tax filer data for giving
How many people know their neighbours and interact with them (frequency) – perception
USE FCM "community stress indicators"
Time use profile and expenditure profile ($ spent on basic needs, $ spent on charitable giving)

Equity
What is your sense that you have an equal chance in life? Why? (this would leave the door open to exploring more details about why people feel they have no chance)
Perceived equity
Intolerance (Ethics Commissioner)

Citizenship: Democratic and political involvement
Time use?
Are my views and opinions considered? Do I feel they count?

Cultural diversity
Demographic profile related to questions of "do I have a fair chance?" and other perception questions.

Volunteerism
Hours spent volunteering could be drawn from available time-use surveys.

Education
Formal education and Life-long learning (Alberta Education/Advanced Education?)
Skill set and capacity inventory (asset account).
Educational attainment statistics are available
Current stock (previous education) and additional education over time
Surveys of Internet use (Strathcona County measures so does St. Albert) ask questions of access, connectivity and use.

Need to consider issues such as:
Has your education prepared you sufficiently for the job market?
Am I doing what I was trained to do? Am I happy with my job?

Infant
Infant mortality is important as a proxy but needs to be disaggregated by profiles.
Health weight babies- useful.
The children's initiative will identify many of the indicators we will need, both provincially and nationally (pre-conception until six)…let us ride on this one.

Children and Teens
Use the "developmental assets" standardized accounting… more robust
Affordable, accessible, child care (birth to age 12), related to family stability, quality of life
Success by six measures
Might want to ask the question not just related to parents responsibility but also do I feel I should be responsible for the well-being of other children/teens in the community.
Not only tolerance for race and culture but also for age differences (teens)
We do measure daycare facility quality, based on (Rick Wallace).
Hot-lunch program is an indicator of a bad thing of social crisis.

Health and wellness, disabled
Need to be consistent with what Regional Health Authorities are already collecting
Need to expand measures of disabled
Also perceived family/household health is good.
Stats Can has a survey of functionality of families (Peter Faid source)
Hours lost to illness and disability (FCM) (work-related).
Physical activity is a good measure.
Self-rating of mental health (plus physical health).. possibly Pop Lab (Sharon Matthias)

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[i] Crisis calls are not yet compiled for all communities.
[ii] Legowski, Barbara (2000). "A sample of community and citizen –driven quality of life/societal indicator projects", Canadian Public Research Network. January 2000, Ottawa. P. 80- 83
[iii] Legowski, Barbara (2000). "A sample of community and citizen –driven quality of life/societal indicator projects", Canadian Public Research Network. January 2000, Ottawa. P. 91- 92
[iv] Crisis calls are not yet compiled for all communities.